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MASTER PLAN FOR

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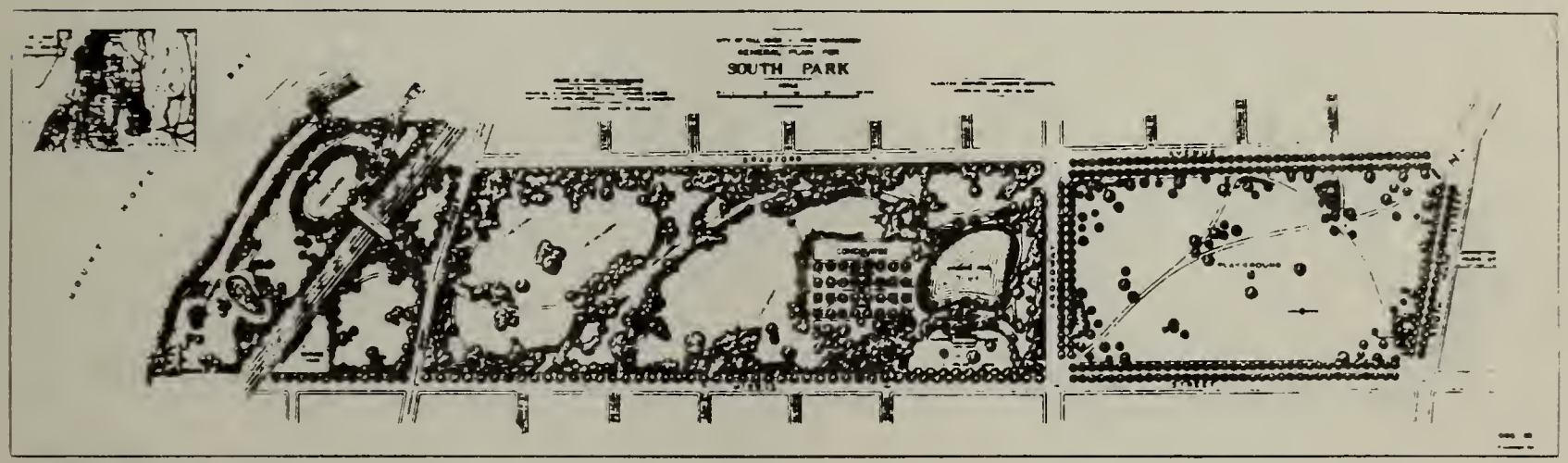
Kennedy Park

OLMSTED HISTORIC LANDSCAPE PRESERVATION PROGRAM



General Plan for South Park, 1904

City of Fall River
Carlton M. Viveiros, Mayor

The Commonwealth of Massachusetts
Michael S. Dukakis, Governor

Office of Environmental Affairs
Department of Environmental Management

Prepared by

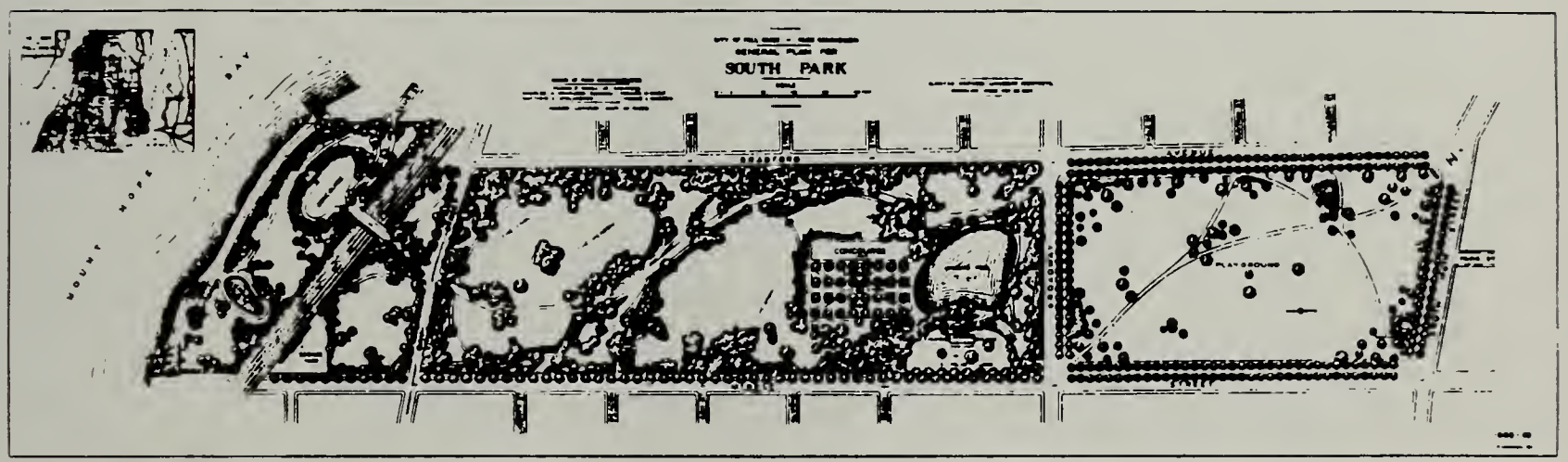
Albert Veri & Associates, Inc.
Landscape Architects/Urban Designers
Providence, Rhode Island

November 1988

MASTER PLAN FOR

Kennedy Park

OLMSTED HISTORIC LANDSCAPE PRESERVATION PROGRAM



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Preface

PREFACE

MASTER PLAN FOR KENNEDY PARK
FALL RIVER, MASSACHUSETTS

The Preface is an overview presentation of the Master Plan Report. Its purpose is to provide the reader with a concise review of the body of the document.

Introduction (Section 1.00, pages 1 through 6)

The significance of Kennedy Park is rooted in the design concepts of Frederick Law Olmsted. Initially conceived in 1871 by the famous landscape architect, it was built in 1904 by his sons' firm, Olmsted Brothers. Due to its notable beginning it is now included in the Olmsted Historic Landscape Preservation Program, a state-wide initiative promoting the preservation and rehabilitation of public open spaces designed by Olmsted and his successors. As part of this program, the Master Plan is a guideline to recapture the original design intent with the restoration of this magnificent Park.

A review of existing conditions shows that the integrity of the Olmsted plan is still evident today. Witness the spatial separation of Park uses, the sensitive use of topography, and the curvilinear circulation system. Land uses of the surrounding area have not changed significantly.

However the original lush plantscape, so crucial to Olmsted design, has deteriorated or has been removed, to the point where the multi-layer concept is no longer recognizable. The historic buildings, as well, have decayed to a serious state of disrepair. In updating the Park to include modern facilities and uses, a number of alterations and additions have unwittingly violated some of its basic design elements. Finally, the incomplete development of the historic plan in the Shore Section negates the original concept of a waterfront park.

The Master Plan (Section 2.00, pages 7 through 27) **and Implementation Program** (Section 3.00, pages 28 through 36)

This Master Plan examines in detail the original design principles, and evaluates the elements that have been preserved, and those that have been destroyed or removed. It documents the past years of activity and change, looking at both positive and negative impacts. Its goal is to reestablish, within the context of present day requirements, the 1904 Olmsted Brothers design of the Park.

1. Objectives

The Master Plan objectives include: Restoration of Olmsted Design, Safety and Security, Maintenance Management, Reconciliation of Non-Olmstedian Elements, Public Education, and Implementation Commitment.

2. Priorities

Immediate reconstruction priorities for funding are: Restoration of Major Vegetation, Restoration of Park Features and Structures and Implementation of the Shore Section Design. Long range funding priorities include: Reestablishment of Understory and Shrub Plantings, Completion of the Path System and Reconciliation of All Non-Olmstedian Elements.

The Master Plan reviews the Historical Concept of the various major elements crucial to the Park including Circulation, Planting Design, and Site Furnishings. It evaluates existing conditions and issues in this context, producing Restoration Recommendations for both the general elements and the specific sections of the Park.

3. Circulation - Historic and Proposed

The historic circulation patterns of Kennedy Park are critical to the user's experience, intended to control and enhance the way the Park is viewed. Flowing lines follow topography and natural land features in the informal areas, while in the formal areas such as the Grove, a more geometric pattern has imposed on the land, producing different impressions on the user. Park roads allowed vehicular traffic to travel at a leisurely pace, separated from the surrounding city by islands of vegetation.

With these precedents in mind, the Master Plan addresses the existing issues, deterioration or incompletion of some walkways and the hazards of present-day vehicular/pedestrian interface. It proposes to complete several pathways that were interrupted or not installed, as well as to reestablish those that have been neglected. It also proposes to add a few in the Olmsted style where circulation is presently inhibited. Plazas at major entry points will be established to provide a sense of arrival and to distinguish vehicular from pedestrian spaces. Details such as width and pavement material will delineate a hierarchy of the entire system and the design of each section must be sensitive to these elements, including their relationship to other sections and to historic precedent.

Proposed vehicular circulation shall be limited primarily to the periphery of the Park, with parking available on the park roads of the Upper Section, at the concourse in the Middle Section and

at the new Shore Section Oval. A concerted effort will be made to seperate vehicular and pedestrian traffic through the use of well-marked crosswalks and pavement changes. The entrance drive to the Concourse as well as the entrances to the Upper Park drives shall be realigned to create safer traffic flow.

4. Plantings - Historic and Proposed

Olmsed used the flowing lines of the circulation pattern to imply spatial delineation, and as one moved along the pathways, passages of scenery created an ever-changing visual experience. These design principles were enhanced in the historical context by the careful use of mass plantings, utilizing both understory and overstory layers of vegetation. A dense buffer of vegetation occurred along all edges of the Park, surrounding the green space and mitigating the intensity of the city outside.

Careful study of available plant lists and planting plans from the 1904 plan reveals multilayers of plant material. Although specific placement of understory plantings cannot be determined, interrelationships of plants and function are apparent through listed groupings of plants and through bed locations on the plans. This three-dimensional analysis of the historic plantings underscores the richness and variation for which the Olmsted firm was famous.

The Master Plan places strong emphasis on the restoration of these plantings, the vast majority of which are no longer in existence. The entire sense of the Park is dependent upon the separation and flow of spaces created by masses of vegetation in conjunction with the topography and path system. Following Olmsted design principles, numerous criteria are recommended for the selection of species and placement of plant material. They are as follows:

a) Choose species initially following the historic context, duplicating as much as possible the original Olmstedian palette.

b) Avoid non-indigenous and specimen materials which would detract from the visual flow of spaces, which require extensive or special maintenance, and/or which would not have been used by the original designer. Use layered groupings of plant material, consisting of large trees, small flowering trees, and high and low shrubs, to achieve vertical planes, while adding variety, texture and seasonal color.

c) Introduce a greater variety of trees than is typical of present-day park plantings, again replicating Olmstedian precedent while avoiding monoculture.

d) Use mostly deciduous materials, to express the changing seasons.

e) Avoid the use of herbaceous perennials, as they require high maintenance and were not favored by Olmsted in his designs.

f) Use masses of vegetation to create positive spaces and frame views.

g) Group trees in groves as evident in the historic plans and on the site.

h) The quantity of shrub massing will be dependent on the intended function, the relative importance of each location, and budget available.

i) Use sensitivity to the function and maintenance level of each area in the selection of plant palettes.

j) Consider availability, maintenance and tolerance of each species.

k) Avoid past errors in the choice of material, avoiding species that have failed in the environmental conditions here.

Finally, it must be emphasized that a serious commitment to maintenance is required to keep the restored Park vegetation in a beautiful, healthy state.

5. Site Furnishings: Historic and Proposed

Original site furnishings in South Park are documented in the "Historic Furnishings Report"(10) and some remnants are still present on the site. In accordance with the overall design, furnishings were chosen and placed to complement views and be consistent with the function of each area, while being subordinate to the whole design.

The existing condition of site furnishings is described in the "Historic Furnishings Report." Generally, they are sparce and/or inappropriate in placement or material. The original graceful furnishings are non-existent, replaced by serviceable but harsh, modern fixtures. The Master Plan makes general recommendations for placement and choice of styles based on Olmstedian principles of design, with specific location of fixtures to be determined at the time each area is designed. Historic reproductions can be found to duplicate original fixtures where appropriate. Changes in recreational activities and socio-economic needs will

necessitate the addition of modern fixtures where function dictates (e.g. floodlights and chain link fencing), however, these fixtures should be sensitively placed to mitigate their effect on the historic landscape. Also included in the Master Plan are recommendations for sign usage and placement.

Budget Proposals and Priorities (Section 4.00, pages 37 through 45)

Associated with the Implementation Program, which encompasses specific suggestions for improvements on each section, the Master Plan includes cost estimates prepared from schematic design drawings for general planning and budgeting purposes. They are as follows (in 1987 prices):

Upper Section	$2,070,000.
Middle Section	$2,879,000.
Shore Section	$1,600,000.

Additionally, each section is broken down into several areas and subtotals are given. Early Action and Phase I Projects, completed or in construction, are also delineated.

Maintenance Management (Section 5.00, pages 46 through 59) **and Appendix A** (pages 60 through 68)

For Kennedy Park's restoration to be ultimately successful and permanent, dedicated commitment to a strong and organized maintenance program must be made by the Fall River Parks Department. The Master Plan reviews the current situation and makes general recommendations on training programs, equipment, budget, reorganization of and additions to work crews and staff, and alternative support for the restoration and maintenance programs.

The Master Plan also presents a specific Maintenance Management Program. Developmental steps produce a cost-effective, organized plan for an exceptional maintenance program at Kennedy Park. An appendix gives model programs for turf, shrub and tree care, including fertilization, pruning, weed control and pest identification and control.

Appendix B (pages 69 through 81)

Preservation Restriction Agreement document by and between The Commonwealth of Massachusetts, acting by and through the Department of Environmental Management, and The City of Fall River relative to the preservation of land in connection with the Olmsted Historic Landscape Preservation Program.

1.00 Olmsted Historic Landscape Preservation Program

1.00 INTRODUCTION

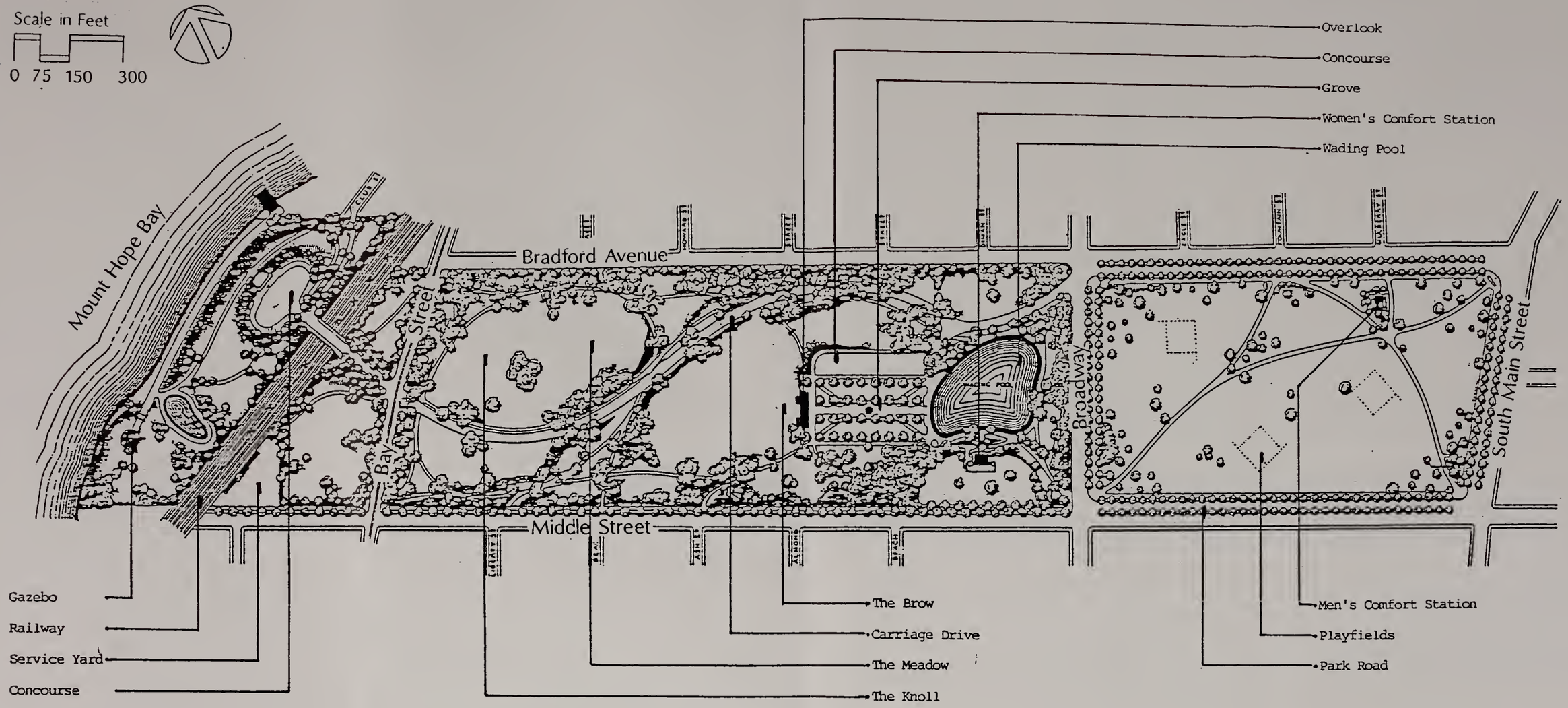
The Olmsted Historic Landscape Preservation Program is a state-wide initiative promoting the preservation and rehabilitation of the public open spaces designed by Frederick Law Olmsted and his successors. Olmsted is often considered to be the "Father of Landscape Architecture" in this country, and certainly one of the most influential and innovative designers in our country's history. Because of his status and creativity, parks designed by Olmsted, and subsequently his sons and successors, are irreplaceable historic resources which we cannot afford to lose.

Kennedy Park, or South Park as it was originally named, is a fortunate member of this elite group of public spaces. Through the wise foresight of Fall River's councillors, the late 1800's trend was followed of preserving open space in growing urban areas. The country's premier landscape architectural firm was retained for design services, and for advice and consultation in the ongoing implementation of the design. Two perspectives of the site by different generations of the Olmsted firm combined to form a plan which was implemented from the early 1870's through the end of World War II. South Park was a symbol of civic pride and a haven from hectic city life.

Sadly, through neglect and deterioration, the functions of social interaction and physical beauty for which the Park was originally intended are not available to the public today. Addressing this decay, the Master Plan document reflects a determined course of action for the restoration of Kennedy Park. Closely following the guidelines set by the Olmsted Historic Landscape Preservation Program, it provides a framework for reestablishment of the beauty, refreshment and recreational opportunities for which many Fall River citizens fondly remember South Park.

1.01 OLMSTED PRINCIPLES OF DESIGN REFLECTED IN KENNEDY PARK

Kennedy Park (South Park) was the first park in Massachusetts to be designed by Olmsted, Vaux and Co. Their plan was completed in 1871 and the Upper Section of the Park was built following this plan. In 1904 a revised plan was developed by the Olmsted Brothers firm (Figure 1-1). A review of postcards,



The Historic Plan - 1904

Figure 1-1

MASTER PLAN FOR

Kennedy Park

OLMSTED HISTORIC LANDSCAPE PRESERVATION PROGRAM

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historic photographs, written documents and oral histories reveals that a rich landscape and recreational facility once existed, which was much admired and used by the citizens of Fall River.

Primarily man-made, the richly planted environment responded to the social needs of the day, providing welcome relief from the surrounding urban life. Active and passive activities were balanced with enhancement of the natural beauty of the place. The Park was a focus of many City-wide and neighborhood activities and provided daily refreshment to local residents. Festivals, rallies and concerts are documented. Casual strolling and carriages dominated the pathways and roads. What a wonderful environment it must have been.

An insight into Olmsted's design philosophy can be found in his Central Park dissertation, "Description of the Central Park," (January 1859), which can easily be applied to all of his parks: "The primary purpose of the Park is to provide the best practicable means of healthful recreation for the inhabitants of the city...It should present an aspect of spaciousness and tranquility with variety and intricacy of arrangement...The Park should ...resemble a charming bit of rural landscape...always remembering, however, that facilities and inducements for recreation and exercise are to be provided for a concourse of people, and that the object of the scenery to be created is only to further the attainment of this end..."(1) (Figure 1-2).

South Park: Wading Pond 1917 (2) Figure 1-2

To accomplish this goal, Olmsted combined the simple natural elements of water, wood and meadow, utilizing seven specific design principles. These principles can still be observed to a greater or lesser extent in Kennedy Park.

TOWARD A DEFINITION OF OLMSTEDIAN PRINCIPLES OF DESIGN

THE SEVEN S'S

SCENERY: Design of "passages of scenery" even in the smallest spaces and in areas intended for active use. Creation of designs that give an enhanced sense of space: indefinite boundaries, constant opening up of new views. Avoidance of hard-edge or specimen planting, creating instead designs that have either "considerable complexity of light and shadow near the eye" or "obscurity of detail further away."

SUITABILITY: Creation of designs that are in keeping with the natural scenery and topography of the site: respect for, and full utilization of, the "genius of the place."

STYLE: Designing in specific styles, each for a particular effect. Primarily in the "Pastoral" style (open greensward with small bodies of water and scattered trees and groves) for a soothing, restorative atmosphere, or in the "Picturesque" style (profuse planting, especially with shrubs, creepers and ground cover, on steep and broken terrain), for a sense of the richness and bounteousness of nature, with chiaroscuro effects of light and shade that produce a sense of mystery.

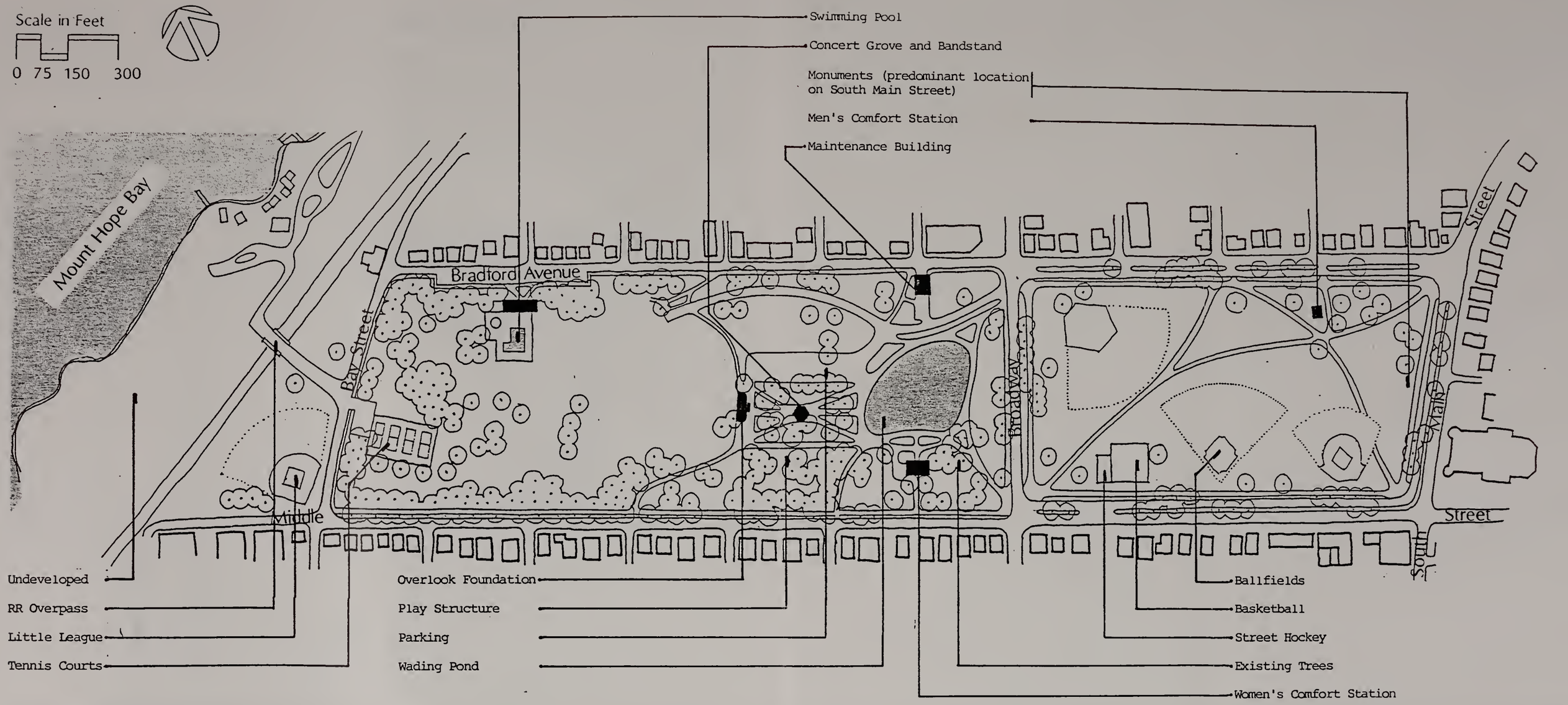
SUBORDINATION: Subordination of all elements, all features and objects, to the overall design and effect it is intended to achieve. The "Art to conceal Art."

SEPARATION: Separation of areas designed in different styles, so that an "incongruous mixture of styles" will not dilute the intended effect of each; separation of ways, in order to insure safety of use and reduce distractions for those using the space; separation of conflicting or incompatible uses.

SANITATION: Provision for adequate drainage and other engineering considerations, not simply arranging of surface features. Planning of designs so that they promote both the physical and the mental health of users.

SERVICE: Planning of designs so that they will serve a "purpose of direct utility or service": that is, will meet fundamental social and psychological needs: "So long as considerations of utility are neglected or overridden by considerations of ornament, there will be no true Art."

Charles E. Beveridge, January 1986



Existing Conditions

Figure 1-3

MASTER PLAN FOR

Kennedy Park

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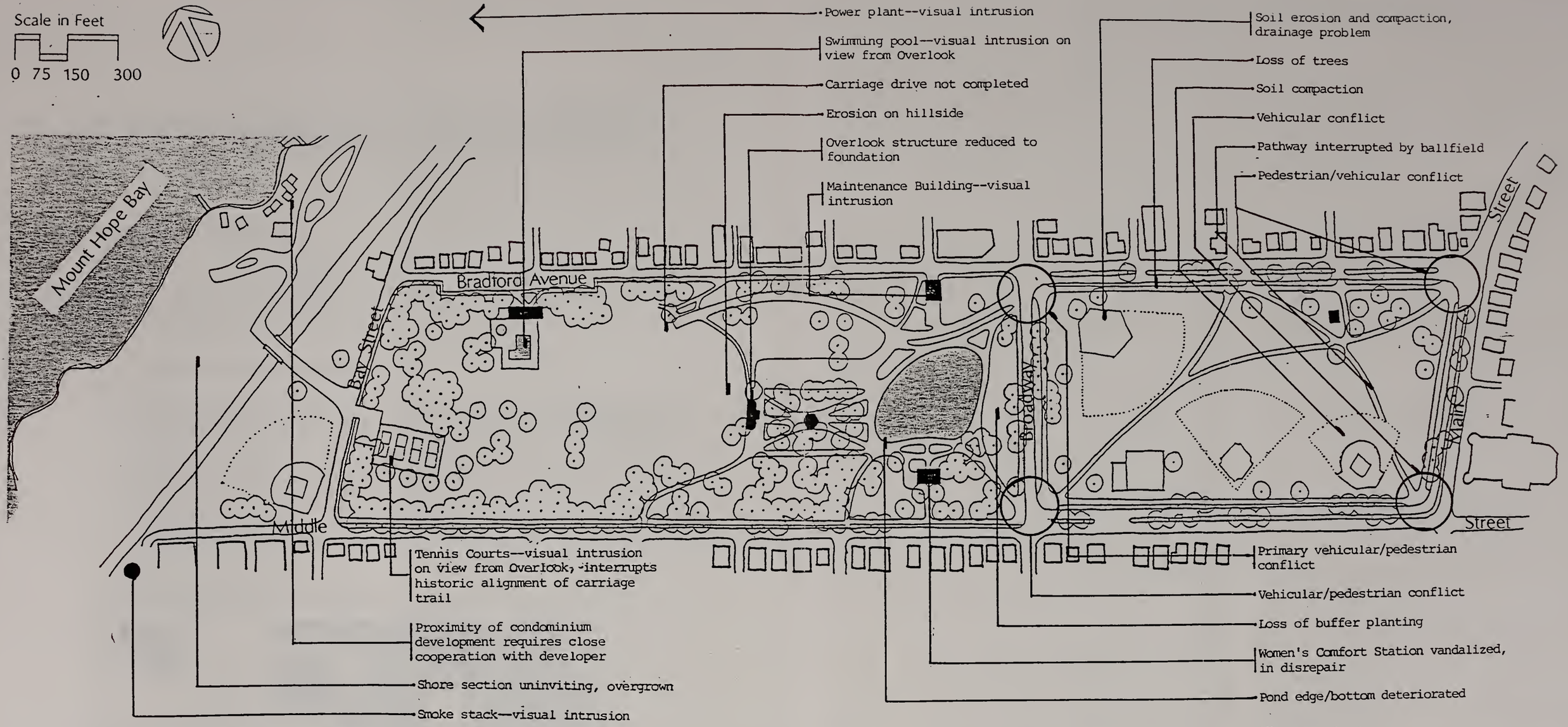

Major Existing Conflicts and Issues

Figure 1-4

MASTER PLAN FOR

Kennedy Park

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It is with these principles firmly in mind that the Master Plan document presents its recommendations. For further historical analysis, refer to "Kennedy/South Park: History of a Public Landscape"(3).

1.02 EXISTING CONDITIONS

The "Site Analysis and Evaluation of Kennedy Park"(4) identifies the existing conditions (Figure 1-3) and the conflicts and issues (Figure 1-4) which the Master Plan will address. In general, they can be summarized as follows:

1. Integrity of Olmsted Design

In spite of alterations and overall deterioration, the integrity of the Olmsted plan remains. The strong design is clearly related to the natural character of the site, evident in the sensitive use of topography (Figure 1-5). Olmstedian principles are exhibited in the curvilinear circulation system, the spacial separation of park uses, and the careful placement of features to emphasize views. The layout of the Upper and Middle Sections are much in accordance with the historic design.

Kennedy Park: Middle Section 1987 (5) Figure 1-5

2. Neighborhood Land Use

Land uses around the Park have not changed significantly. Single family and multi-family residences dominate the area, with commercial development along South Main Street and industrial along the water. The industrial land, dormant to a large extent except for some low-key manufacturing, is in the process of revitalization. A new 100-unit condominium project is being developed along the waterfront to the north of the site. To the south there are prospects of converting existing buildings to new, more productive uses.

3. Existing Vegetation

An extensive inventory of existing vegetation shows that the original lush, multilayer plantscape that once secluded the Park from the surrounding city is gone, although a number of the large trees remain. Most have survived by pure strength of species rather than by any visible maintenance program. The passages of scenery and planned vistas, so important to Olmstedian design, have been diluted if not entirely lost with the loss of plant material, especially the shrubs and understory trees.

4. Existing Facilities

Comfort buildings and other facilities, such as the Wading Pond and Concert Grove, are limited in use and badly vandalized. Other original furnishings (lights and benches, etc.) are almost non-existent.

5. Vehicular Circulation

Circulation within the Park is mixed in quality due to deteriorated pavements and changes in vehicular needs and intensity. In many areas the path system is useless. Walkways have been removed or interrupted by such additions as the tennis courts and ballfields. The carriage road from the Overlook to Bay Street was never completed. The Park roads are used more for parking than for enjoying casual rides.

6. **Post Olmstedian Construction**

New service buildings and a swimming facility have violated some of the basic Olmstedian design principles of location and style, unwittingly intruding on critical views and circulation patterns. External installations as well, such as the power plant on the other side of Mount Hope Bay intrude visually on the Park.

7. **Shore Access**

Access to the Shore Section is available by the bridge over the railroad but the plan for this area was never implemented and there is no easy access to the water's edge. In its present condition the site, while so integral to the concept of a waterfront park, is uninviting and appears to be separate from Kennedy Park.

CONCLUSION

Thus, the primary problems within the Park do not require major redesign or land use changes, but unchecked deterioration due to poor maintenance and management, inappropriate intrusions of modern facilities which need to be screened or altered, and incomplete development of the historic plan. More specific issues are examined in subsequent sections of this report.

2.00 The Master Plan

2.00 THE MASTER PLAN

This Master Plan is designed as a workbook, a set of directives for reassembling and maintaining Kennedy Park. An important historic landscape, the site is a City treasure and worthy of careful attention. Although funding for the First Phase Implementation will come from the Olmsted Historic Landscape Preservation Program, the final improvements may be years away since public facilities are dependent upon public funding and priorities. Since Kennedy Park is an important link to this City's history and pride, and since the need for its services is great, this task of funding should not be delayed. The Master Plan relies upon illustrations of design intent and hopes are that the City will continue to retain quality landscape architectural firms to implement the capital construction aspects of the Plan.

2.01 OBJECTIVES

The objective of the Master Plan is to reestablish, within the context of present day requirements, the 1904 Olmsted Brothers design of the Park. Thus, it relies on a knowledge of the past; the wisdom of Olmsted's design principles is inherent in the Park, and there is no need to redesign or apply a new design philosophy.

Using the guidelines set out by the Olmsted Historic Landscape Preservation Program, the Master Plan has defined the following objectives to be used in the solutions of issues presented in the "Site Analysis and Evaluation of Kennedy Park":(6)

1. **Restoration of Olmsted Design**

   To the greatest extent possible the original plan shall be preserved and Olmstedian principles adhered to, priority being given to preservation of key remaining elements and reinstatement of key lost elements of the design. Yet while the overall spirit of design intent should be rigidly followed, accuracy of detail may be subordinated to current public usage, handicapped accessibility, maintenance requirements, safety and financial issues.

2. Safety and Security

An intent of the historic design was to create a pastoral scene within the urban environment for rural inhabitants who had relocated to the city. Dense, vegetative plantings at the edges of the Park were designed to screen or buffer this pastoral setting from the surrounding city. Today's urban dwellers however, are often unnerved by visually obstructed and enclosed spaces.

The public's perception of the park as a safe and secure environment must be reconciled during the Park's restoration. Through careful design of plantings, circulation, access (both physical and visual) and lighting, historic design objectives can be balanced with present day social needs to create a pastoral environment that is perceived to be safe and secure.

3. Maintenance Management

Initially, design solutions should include materials that contribute to maintenance efficiency, taking into consideration not only the original design intent but also the current level and type of usage that the facilities receive. Concurrently, with the restoration process, an organized, comprehensive program has been developed to be implemented to adequately maintain the "new" Park. Preventative maintenance shall be used to arrest deterioration before it becomes apparent.

4. Reconciliation of Non-Olmstedian Elements

While it is recognized that certain additions to the Park (swimming pool, tennis courts) are necessary and permanent even though they are inconsistent with the design principles, positive measures should be taken to mitigate the visual intrusion of these facilities upon the Park environment.

5. Public Education

Encourage special programming and Park usage. Develop an informational signage system and scheduled educational programs to increase public awareness of the historic and environmental signifricance of Kennedy Park. Promote volunteerism in association with Park maintenance as well as public education.

6. **Implementation Commitment**

A positive attitude and long-term commitment to the faithful restoration of this magnificent park is necessary in the public and private sectors to resolve existing conflicts and recapture the beauty, sensitivity, and usefulness of this civic resource. It is strongly urged that only registered landscape architects, experienced in the restoration of historic landscapes, be chosen for development of final site designs, and that actual construction occur under their close supervision.

2.02 PRIORITIES

In accordance with the above, the following shall be immediate funding priorities for the physical rejuvenation of Kennedy Park:

Immediate funding priorities:

1. **Restoration of Major Vegetation**

The installation of large trees and extensive sizeable shrub plantings will have an immediate visual effect on Park users. Selective pruning of mature trees, turf rehabilitation and improved maintenance practices will enhance this effort.

2. **Restoration of Park Features**

The Pond and Concert Grove areas are now the most visible symbols of deterioration, and their renovation will also create an immediate visual impression of upgrading.

3. **Restoration of Park Structures**

The rehabilitation of the Overlook and Comfort Stations is urgent, since not only are these buildings crucial to the positive experience of Park users, but they are important historic structures which will be lost if continued neglect escalates deterioration.

4. **Implementation of the Shore Section Design**

   This improvement has two-fold importance. Since the Park was designed as an integrated whole, with the waterfront as a strong focus, the original design intent will never be fully realized until this is completed. In addition, by contemporary standards this piece of land is very valuable and the longer it is neglected as parkland, the more vulnerable it becomes to outside development pressures.

Long range funding priorities include:

1. **Reestablishment of Understory and Shrub Plantings**

   Through yearly budgeting for new plant materials and improved horticultural maintenance, create the multi-layer textures of Olmstedian design to provide a Park edge buffer from the surrounding urban environment.

2. **Completion of the Path System**

   Reestablish the original alignment of the Carriage Drive as a Pedestrian Concourse and reconstruct all pavements.

3. **Reconciliation of All Non-Olmstedian Elements**

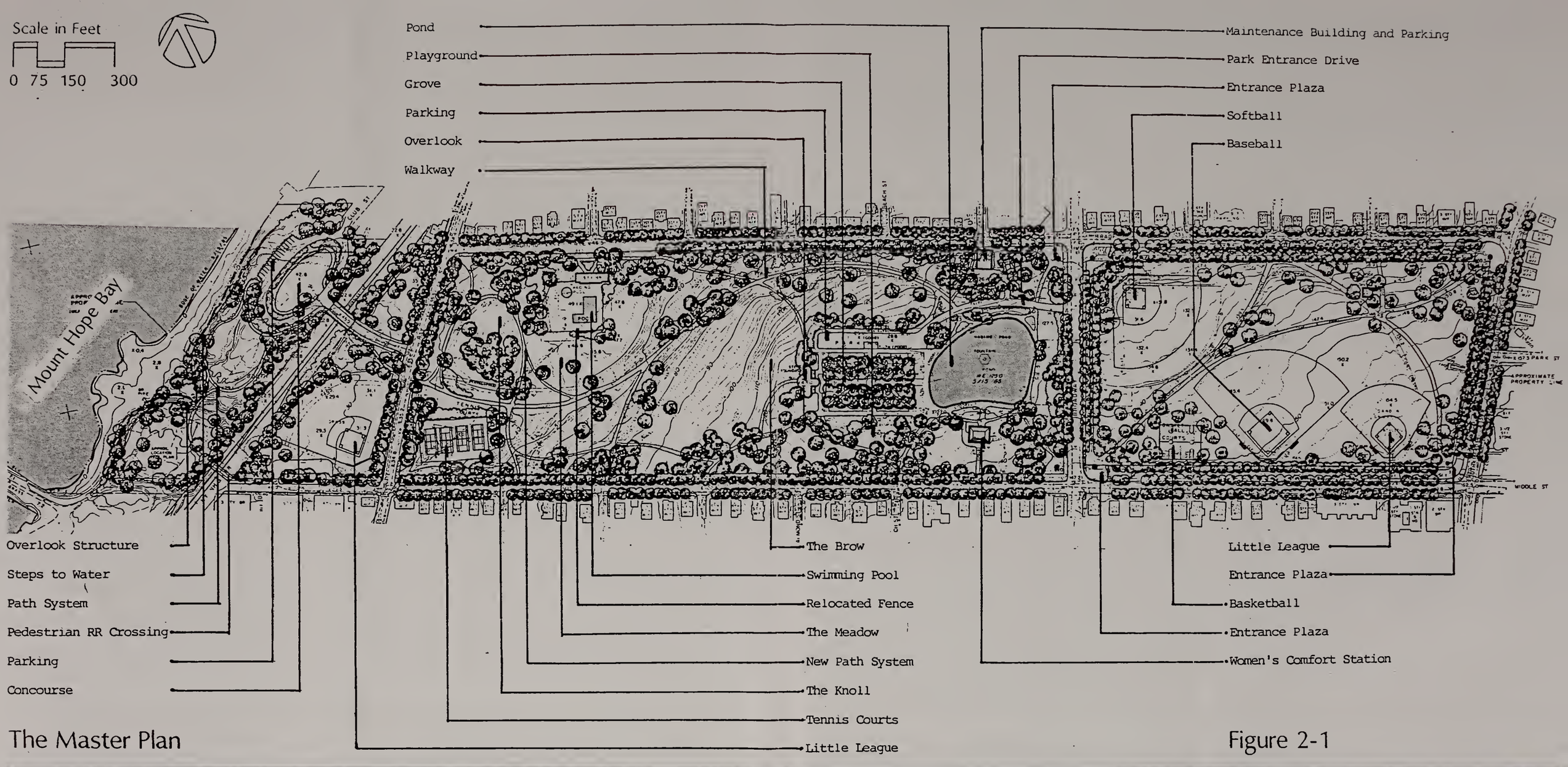
   Redesign pavements around the pool area to be less conspicuous, introduce vegetative screening of visual intrusions such as the maintenance building, and eventually reorient the tennis courts should they ever need major renovation and resurfacing.

The use of both "shall" and "should" in the text is deliberate, with "shall" indicating changes and improvements that are imperative to the restoration and "should" indicating those that are recommended if funding allows, but not mandatory. With these objectives in mind, the Master Plan (Figure 2-1) presents specific recommendations as solutions to the issues and conflicts unique to Kennedy Park.

2.03 CIRCULATION - PEDESTRIAN AND VEHICULAR

A. HISTORICAL CONCEPT

Pedestrian and vehicular circulation was important in the Olmstedian design philosophy. It controlled the way the Park was experienced by the stroller and rider. As one passed through the scenery, unfolding vistas and space configurations were a delight and added to the recreational experience. This passage of scenery relied upon a well-coordinated system of pathways which was responsive to the topography and sequence of intended views.



The Master Plan

Figure 2-1

MASTER PLAN FOR

Kennedy Park

OLMSTED HISTORIC LANDSCAPE PRESERVATION PROGRAM

Prepared by

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Office of Environmental Affairs
Department of Environmental Management

The curvilinear walkway system in many ways responded to this design priority, and the carriage road in the Middle Section had a wide horizontal sweep to its line of travel and view (Figure 2-2). Conversely, straight lines were necessary in areas such as the Grove, where the stroller could see his destination and thus preferred a direct path of travel.

Kennedy Park: Carriage Drive 1987 [7] Figure 2-2

The Park roads allowed one to travel within the confines of the Park, separated from the adjacent street traffic by islands of densely planted trees and shrubs. One would enter the Park roads primarily at the intersections and slowly travel the route to the Middle Section, entering the Overlook area parking or continuing down the curvilinear road to the Shore Section.

The early park planners did not propose a grade separation at Broadway of pedestrian and vehicular traffic, although this was a standard mark of Olmstedian design. Presumably, this was because of prohibitive costs of rock excavation, as well as the short length of Broadway bisecting the park; proper vehicular grades would require the excavation (or overpass) to continue far past the Park boundaries, detrimentally affecting the surrounding city's traffic patterns. Additionally, today's heavy traffic levels were most likely not anticipated.

The entrance plazas are important pedestrian gateways into the Park. They must be clearly discernible from the surrounding area and should be wide and inviting. Olmsted preferred a densely planted entranceway in the Middle Section, but today's social

requirements for surveillance will modify this original design feature to some extent, making the entrances more visually accessable and open.

B. MASTER PLAN PROPOSAL

1. Pedestrian Circulation

ISSUES

Deteriorated pavements are a major detriment to the use of the Park walkways. The carriage road is unpaved. A principal walk in the Upper Section has been interrupted by a Little League field. Historic walks have become overgrown with grass. Matching the historic color and texture of concrete is difficult and costly. Pedestrian crossing of Broadway is a hazard and must be carefully designed and controlled to occur at Broadway's two intersections.

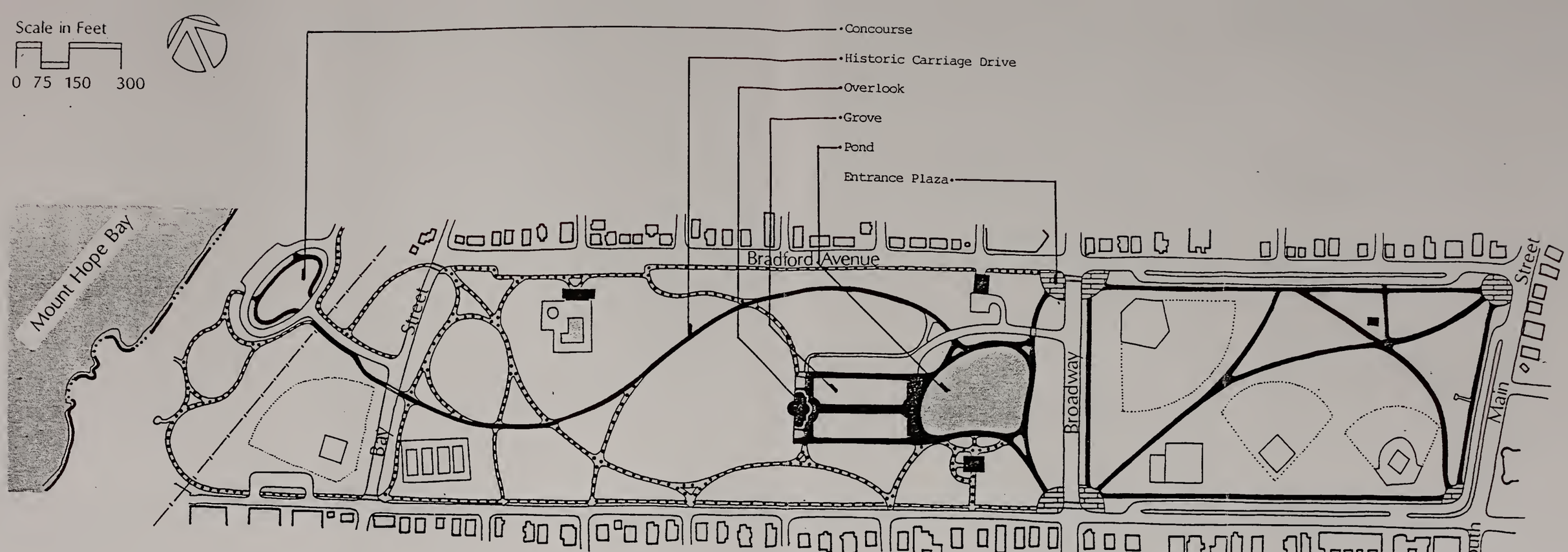
All of these factors are major issues to be addressed in the implementation of the Master Plan. The curvilinear pattern should be maintained and the principle historic routes should be honored. (Figure 2-3) The width of the walkways is another major consideration and we recommend that the historic widths be maintained in future improvements. These recommendations however, will be modified slightly in the heavily used areas of the Overlook and Grove.

RECOMMENDATIONS

1. A definite hierarchy and configuration of pedestrian walkways and areas is illustrated in Figure 2-3. This recommended plan shall be used as a guide for determining materials, detail and design intent.

2. The carriage drive (currently gravel and grass) from the Overlook to Bay Street shall be designed as a major pedestrian walkway. Its width should be a minimum of 12 feet for service access.

3. As need and desire lines dictate, the addition of a few new pathways in the northwest corner of the Middle Section is recommended, following the curvilinear theme of the Olmsted Brothers.(Figure 2-4). This accomplishes two objectives: a) in the event that development of the Shore Section is delayed, the pedestrian circulation system will be unified within the currently useable park boundaries; b) this area is not currently served by any path system, and although there are no desire lines present, it is hoped that



Legend

Entrance Plaza

Primary System

Secondary System

Proposed Pedestrian Circulation Heirarchy

Figure 2-3

MASTER PLAN FOR

Kennedy Park

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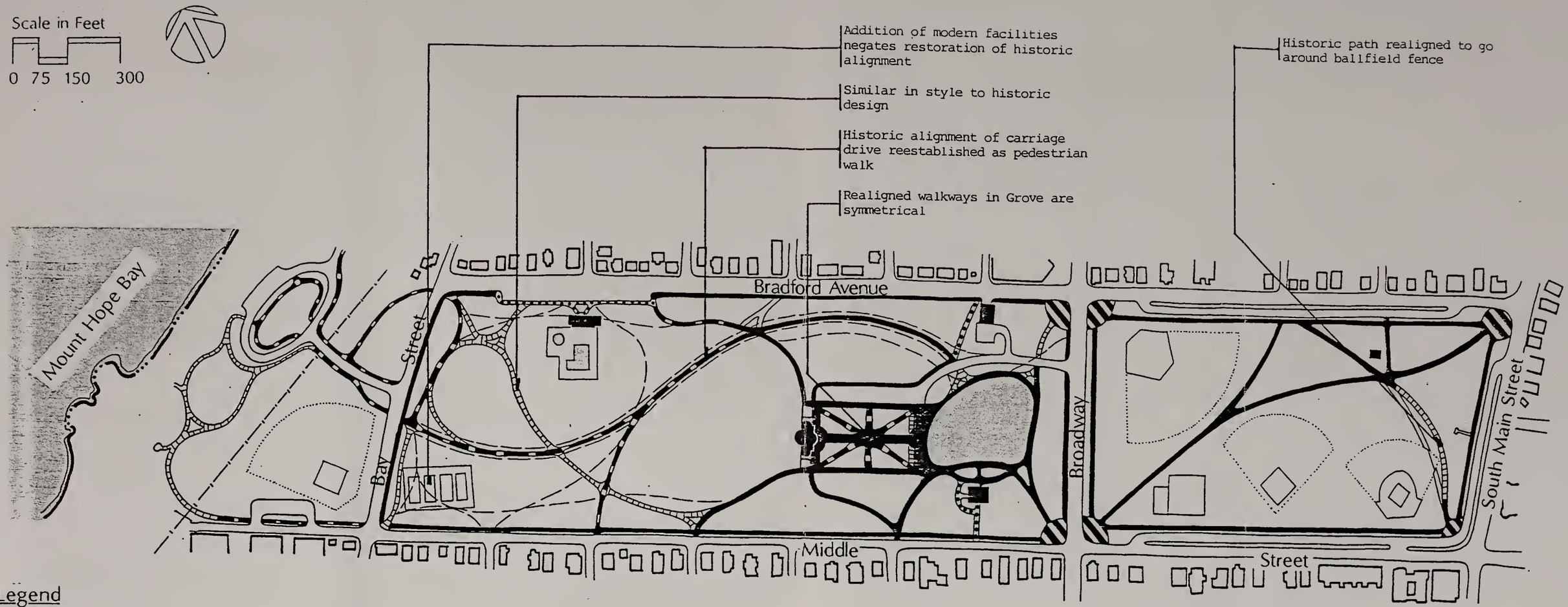

Comparison of Pedestrian Circulation - Historic and Master Plan

Figure 2-4

MASTER PLAN FOR

Kennedy Park

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providing a system and a "place of arrival" at this lower end around the Meadow/Knoll area will encourage casual pedestrian usage. The suggested routes deviate slightly from the historic plan, taking into consideration the existing swimming and tennis facilities which were not there originally, but nevertheless are in keeping with the overall feeling of the Olmsted scheme.

4. The interrupted path in the Upper Section shall be realigned and reconstructed to go around the ballfield.

5. The entrance plazas should be wide expanses of pavement with minimum dimensions of 25' by 25'. Examples of scale can be seen in the Park today at the South Main Street entrances.

6. The pedestrian pavement material should be carried across roadways to connect opposite plazas/pathways where appropriate (Broadway and Bay Street). This will visually connect different sections of the Park to the strolling user, as well as delineate the pedestrian/vehicular traffic interface areas. Since many crosswalks in Fall River were originally granite, this would be one appropriate material recommendation.

7. Benches, trash receptacles and light standards shall be set back from the pavement edge, allowing room for comfortable passage of pedestrians.

8. Pavement materials shall be reminiscent of the historic plan. The ferro-concrete specified by Olmsted was to reduce the glare and therefore intensity of the pavement to the viewer. On this basis, more readily available materials may be considered. A palette of pavements shall include:

   a) The primary and more formal pedestrian pathways, such as the Grove area, shall be cobble-edged bituminous (see Item 9).

   b) The secondary, curvilinear, and sloping pathways will be a standard bituminous surface. Where budget permits, it is suggested to use a stone seal of 3/8 inch crushed bluestone aggregate with emulsified asphalt binder to modify the black color of the bituminous.

   c) In very casual and level areas, such as the Oval of the Shore section, a softer material may be appropriate, such as stone fines gravel (less than 2% slope).

   d) The high-use, highly visible entrance plazas will be of scored concrete paving, possibly tinted with color.

e) Under benches it will be necessary to have a concrete footing in which to bolt the bench legs. This should be as inconspicuous as possible, with the front edge of the bench set one foot back from the edge of the pathway (Figure 2-11, after page 22).

f) Roadways should be standard bituminous paving with new or used granite curbing.

9. Cobblestones are a material of particular importance in Fall River, and the City has passed legislation for their preservation, stockpiling and use in public areas. Since there is historic precedent for cobble edging for soft-surface paths in the Park, this type of detailing may be useful as a subtle designation of hierarchy within the path system. However, their usage as surface pavement for major pedestrian areas should be limited and carefully installed to provide a good walking surface.

10. Dense buffer plantings and fences along Broadway are recommended to discourage pedestrians from crossing at points other than the designated intersection crosswalks. Additionally, to keep young visitors from wandering onto Broadway, a 3-1/2 foot black pvc-coated fence will be concealed in the border planting.

2. Vehicular Circulation

ISSUES

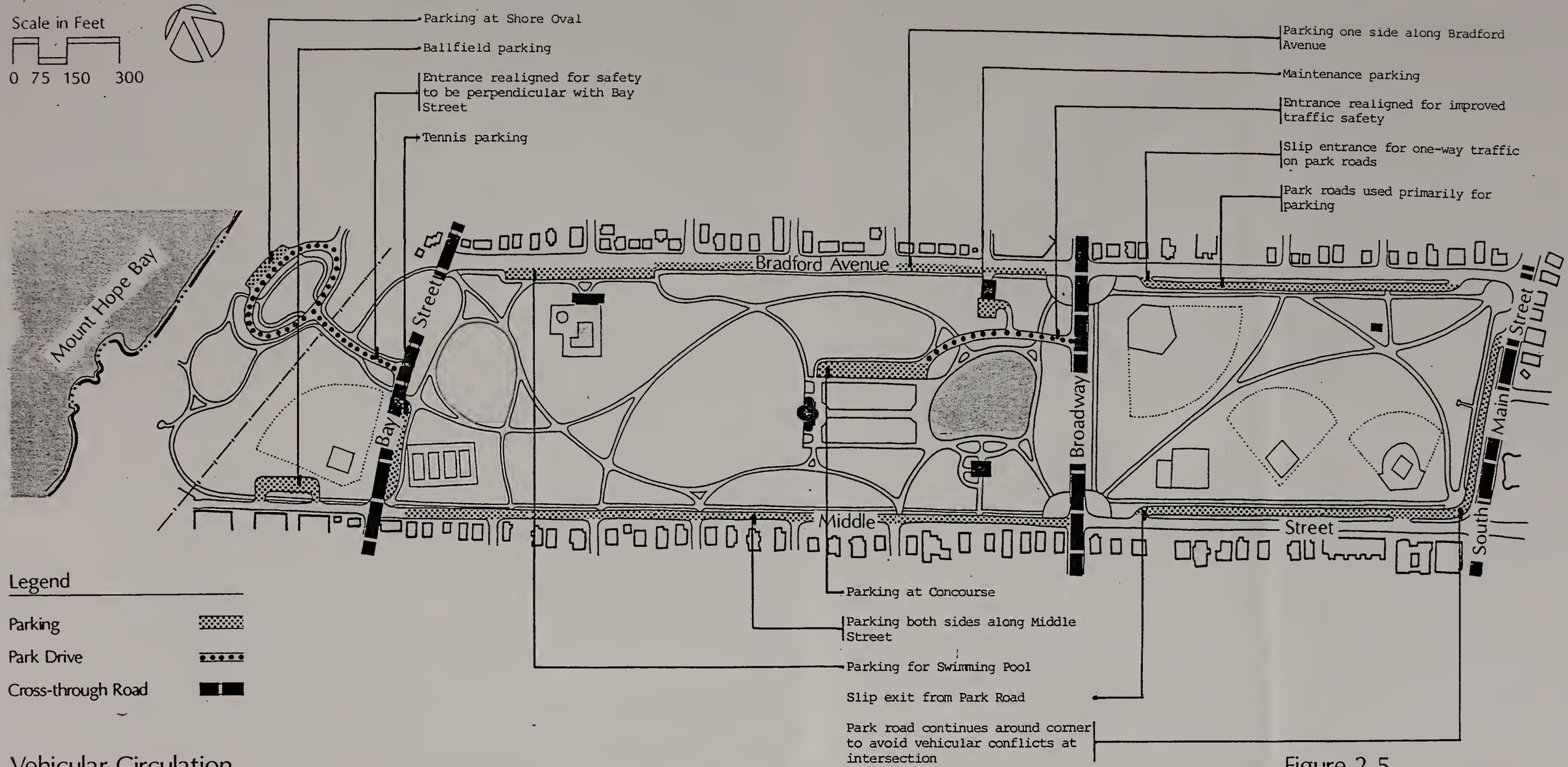
It is no longer realistic to anticipate leisurely park drives in the fast-moving automobiles we have today. The Upper Section Park roads are used as parking for sports facilities or the adjacent churches and hospitals. Shortcuts by motorists desiring to avoid the Middle Street/South Main intersection is a limited problem, but still worthy of concern.

The wide intersections of roadway and Park roads are not clearly defined, and pedestrian and motorists alike are at risk.

Vehicular entrance to the Overlook parking area requires intensive design either to relocate the entrance or redesign the intersection.

RECOMMENDATIONS

1. Expand pedestrian walks at the intersections of city streets to form broad entrance plazas, following the original Olmsted and Vaux concept of 1871, using the one original on the corner of Bradford Avenue and South Main Street as a model.



Vehicular Circulation

Figure 2-5

MASTER PLAN FOR

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2. The Park drives of the Upper Section should be viewed more as parking areas than as thoroughfares, as current usage dictates. They shall be one way to minimize traffic congestion. The pedestrian plazas will realign the drives, redirecting Park traffic away from crowded street intersections and separating vehicular and pedestrian usage within the Park. Provide a slip-type entrance and exit for each drive at least 100 feet from street intersections, clearly marked "One Way".

3. Crosswalks, clearly marked by either thermoplastic markings or pavement changes, should be an immediate priority in the Park's rehabilitation.

4. Realignment of the entrance drive from Broadway into the Middle Section, which serves as access to the service building and the Overlook parking, is another priority for immediate attention. Final determination of the location should be based upon the design of the Pond/Grove/Overlook area. (See Figures 2-5 and 3-6.)

5. Access to the Shore Section should reflect the original design plan; compare Figures 1-1 and 2-5. Coordination with the adjoining developer to clean and grade this area is in process and work may be completed in Spring of 1987. Close monitoring of the work is recommended to ensure that even temporary improvements are in keeping with the historic design intent.

6. Off-street parking in the Shore Section is recommended in the Oval of the Shore Section (at least 12 cars), and at the Little League Field at Middle and Bay Streets (at least 10 cars). Parking at the pool facility should be retained and selected spaces clearly marked for food-vendor vans which provide a welcome amenity for Park users.

7. Bituminous roadways shall meet the City's requirement of 4-inch thickness. Granite curbs (new or used) are recommended especially in the Upper and Middle Sections (Overlook), and the Shore Section. Precast curbs may be considered as an alternate only if used in isolated areas and sandblasted to an exposed aggregate finish.

8. Pavement markings should be white.

2.04 PLANTING IMPROVEMENTS

A. HISTORICAL CONCEPT

Plant materials played a major role in the original design of Kennedy Park. The 54-acre site was cleared farmland when the City took possession and Olmsted, Vaux & Co. first prepared the master design for the site in 1871. The 1904 Olmsted Brothers plan carried through the original conceptual ideas with detailed planting plans, many of which are available today for study. The most impressive accounting of the rich plantings are the many photographs and postal cards saved by private citizens and the Fall River Historical Society. Together with oral histories from individuals who remember South Park in its prime during the 1920's and 1930's, the documents provide a window into the past.

South Park: Shrubbery at Entrance 1914 (8) Figure 2-6

What a beautiful and gracious garden this must have been, created by rich vegetation, the flow and definition of spaces, and the visual separation from the surrounding city (Figure 2-6). The richness of intended plantings is illustrated by the Olmsted Brothers list of plant materials for the Middle Section (Table 2-1). Examination of the actual planting plans reveals a dense multilayer understory of small trees and shrubs, and indicates specific placement of the Olmsted design style. The Olmsted Brothers firm relied upon indigenous plants, mostly deciduous, many aromatic.

Alphabetical Listing of Materials on the Olmsted Brothers Planting Plan for Middle Section

(Translation to current nomenclature in parentheses)

Large Trees

Acer rubrum
A. saccharinum
Betula lutea
Castanea americana
Celtis occidentalis
Cladrastis tinctoria (lutea)
Fagus ferruginea (grandifolia)
Fraxinus americana
Gymnocladus canadensis (dioica)
Liquidambar styraciflua
Nyssa sylvatica
Platanus orientalis
Populus bolleana
Quercus alba
Q. coccinea
Q. palustris
Q. rubra
Q. tinctoria (velutina)
Salix alba
Tilia americana
Ulmus americana

Small/Medium trees

Acer pennsylvanicum
Carpinus americana (caroliniana)
Cercis canadensis
Cornus alternifolia
C. florida
Crataegus coccinea (intricata)
C. crusgalli
Halesia tetraptera (carolina)
Ostrya virginica
Ptelea trifoliata

Shrubs

Amelanchier canadensis
Aralia pentaphylla (Acanthopanax sieboldianus)
Berberis thunbergii
B. vulgaris
Calycanthus floridus
Caragana arborescens
Ceonothus americanus
Comptonia asplenifolia (peregrina)
Cornus mas
C. paniculata (racemosa)
C. sericea

C. stolonifera
Cydonia japonica (Chaenomeles lagenaria)
Dirca palustris
Diervilla sessilifolia (trifida)
Forsythia fortunei
F. intermedia
F. suspensa
F. viridissima
Hypericum aureum (frondosum)
H. densiflorum
H. kalmianum
Jasminum nudiflorum
Ligustrum ciliatum (Ibota)
L. vulgare
Lindera benzoin
Lonicera alberti (spinosa)
L. coeruleum
L. morrowi
Myrica cerifera (pennsylvanica ?)
Nemopanthus canadensis
Philadelphus Gordoniana
P. grandiflora
P. odoratus ?
Potentilla fruticosa
Pyrus arbutifolia (Aronia)
Rhus aromatica
R. copallina
R. glabra
R. typhina
Rosa blanda
R. humilus
R. lucida
R. multiflora
R. nidita
R. rubiginosa
R. setigera
Rubus dumetorum ?
Spiraea opulifolia (Physocarpus opulifolius)
Symphoricarpus racemosa (albus)
S. vulgaris (orbiculatus)
Viburnum acerifolium
V. dentatum
V. lantana
V. opulus
Xanthoxylum americanum (Zanthoxylum)

Vines/climbers

Ampelopsis quiquifolia (Parthenocissus)
Aristolochia sipho (durior)
Celastrus orbiculata
Clematis virginiana
Euonymus radicans (fortunei)
Lycium barbarum

To understand the intricacies of the Olmsteds' planting concepts, the consultants conducted an extensive analysis of both existing vegetation and the historic planting plans. First, the plant lists found on the plans were organized to determine categories of large and small trees and shrubs. Also, outdated botanical names were researched and translated to current ones, to preclude misidentification.

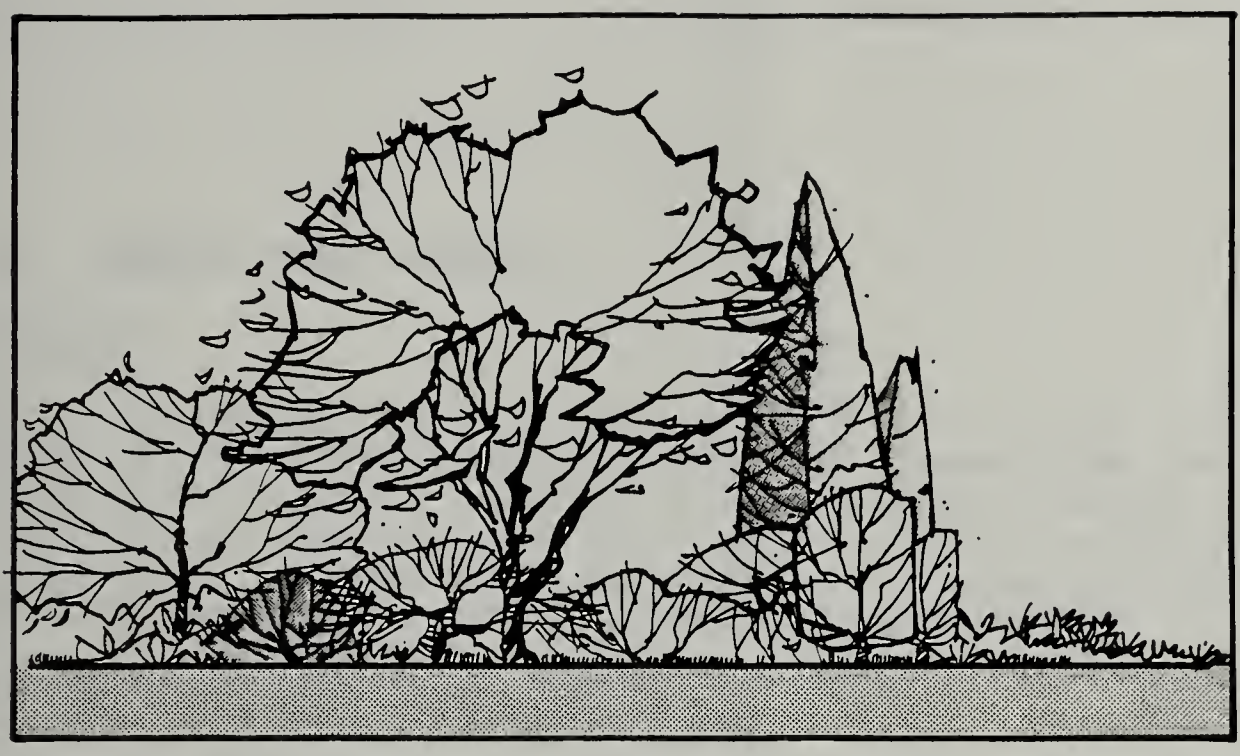
Then, each layer of the multilayer plantings was analyzed separately. The canopy or large tree layer was fairly easy to identify since individuals were labelled on the plans; study of their composition brought an understanding of species, types, and the manner in which they were grouped to create distinct spatial arrangements. To a lesser extent, some of these groupings are still evident, where six to eight of one species grouped together give a unique identity to certain areas.

The shrub and small tree understories were not as easily defined. The Olmsteds specified groupings of species to be repeated in various places, however each group was not consistent and often included species from other groups. Although they listed quantities, they did not give specific locations for planting, as they did the large trees, and presumably planned for on-site location during installation.

Therefore, while the Olmsted planting plans did not show exact placement, they did provide an understanding of the flow and massing in a naturalistic setting, as well as the spatial configuration of lower foreground and higher background groupings (Figure 2-7). They also identified certain areas as specifically planted buffer controls (e.g. groupings with many thorny materials) and other areas as more ornamental in character (those groups with flowering and aromatic species).

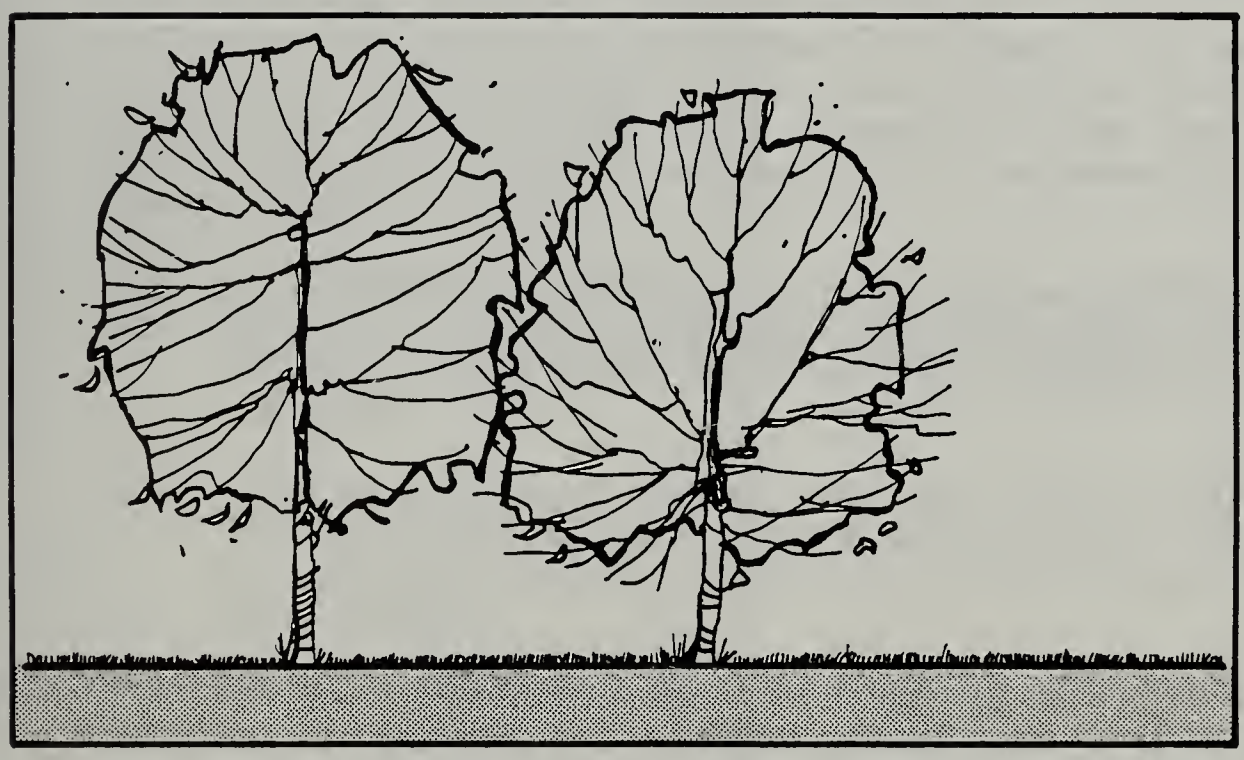
An herbaceous layer was not identified in the planting plans, although several of the shrubs listed are "sub-shrubs", and served as herbaceous material. Also, historic photographs indicate flower beds by the Women's Comfort Station.

This three-dimensional interpretation of the historic plantings underscores the richness and variation for which the Olmsted firm was famous. Each area was treated with plant material according to the specific site needs, yet always integrated into the whole. The edges of the Park were all different, yet there was enough repetition and flow to create a unified series of spaces.



Historic Plan

Historic planting concept; shade trees, small trees, shrubs, some evergreens in tree layer.



Existing Condition

Some shade trees remain, but there are no small trees, evergreens, or shrubs.

Master Plan

Complement shade trees with small trees and shrubs; evergreens in shrub layer and for screening purposes.

Multi - Layer Planting Concept

Figure 2-7

B. MASTER PLAN PROPOSAL

ISSUES

Most of the plants in the Upper Section and the Overlook/Pond area of the Middle Section are gone, destroying the spatial interrelationships so crucial to Olmstedian Design. The Shore Section, of course, was never developed and remains a derelict area used for dumping. Restoration of these plantings is one of the issues most crucial to the whole project.

RECOMMENDATIONS (Figure 2-8)

1. The Early Action Project has made a significant improvement to the Upper Section. The combination of 5-5-1/2 inch caliper Acer platinoides, "Emerald Queen" Norway Maples, and a uniformly graded bed of sod has uplifted the area. In many ways it has given us a glimpse of the past. The following points were recognized in implementation of the Early Action:

   a) The uniform planting of large trees gives an immediate affect. The minimum size for specimen and trees of special importance such as this should be 5-5-1/2 inch caliper.

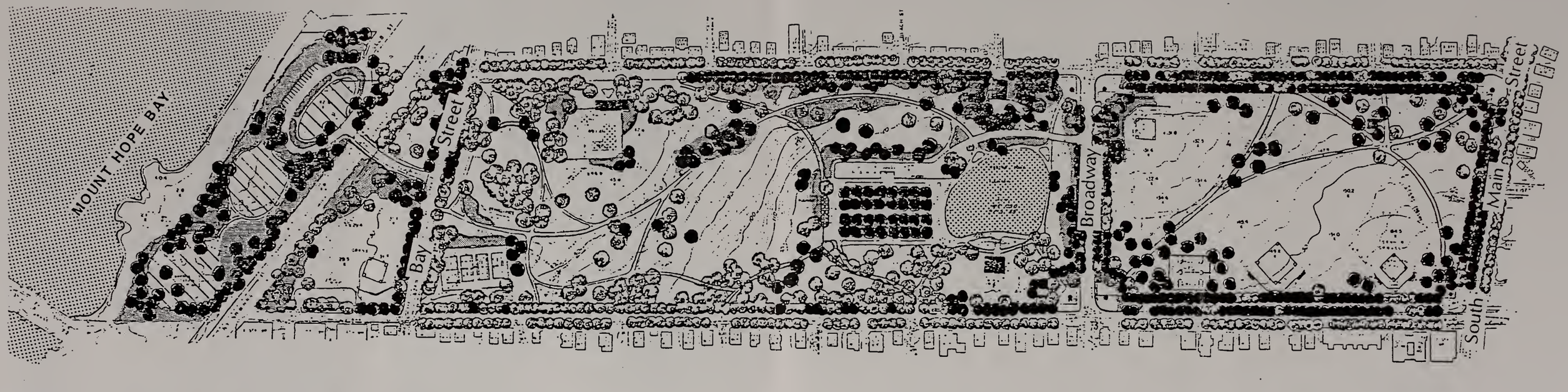
   b) To the greatest extent possible the Master Plan should be the guide to all future plantings. Design revisions or drastic changes in species will affect the overall end result.

2. The following general design criteria have been used in the initial selection of recommended plants (Table 2-2) and in the conceptual redevelopment of the Planting Plan. It is urged that specific site design developments seriously consider them also. The suggested plant list is not intended to be all inclusive, and additions or deletions may be necessary according to specific site and environmental conditions.

   a) Species shall be chosen initially following the historic context of material represented in Olmsted's listings; both the original planting plan and the lists of plants actually purchased and planted by the Park Superintendent, under the direction of the Olmsted firm, should be referenced, and can be found in "Kennedy/South Park: History of a Public Landscape"(9). Other species commonly used in that era may also be used, with improved cultivars being acceptable. Material used in the rehabilitation of other Olmsted Parks, such as Prospect and Central, may

Scale in Feet

0 75 150 300



Legend

New Trees

New Shrub Massing

New Grass Area

Planting Improvements

Figure 2-8

MASTER PLAN FOR

Kennedy Park

OLMSTED HISTORIC LANDSCAPE PRESERVATION PROGRAM

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Initial Recommended Plant List

		FOLIAGE		ORNAMENTAL CHARACTER				TOLER-ANCE		HISTORIC CONCEPT		NOTES
		Deciduous	Evergreen	Flowers	Fruit	Bark	Fall Color	Sun	Drought	Olmsted Plan	Typical of Era	
LARGE TREES:												
Acer platanoides	Norway Maple	X					X	X	X			Good shade tree, fast-growing
Acer rubrum	Red Maple	X		X		X	X	X		X		For wet areas
Acer saccharum	Sugar Maple	X					X	X	X	X		Improved variety
"Green Mountain"												
Aesculus x carnea	Horse Chestnut	X		X				X	X			More drought resistant than A. hippocastaenum
Fraxinus pennsylvanica var.	Green Ash	X					X	X	X	X		
Liquidambar styraciflua	Sweet Gum	X					X	X	X	X		Late leafing out
Quercus borealis	Red Oak	X					X	X	X	X		
Quercus palustris	Pin Oak	X						X	X	X		
Tilia cordata	Linden	X		X				X	X	X		
SMALL TREES:												
Carpinus betulus	European Hornbeam	X				X	X	X	X	x		
Cornus florida	Flowering Dogwood	X		X	X			X		X		Light shade desirable, use in protected areas
Crataegus species	Hawthorne species	X		X	X			X	X	X		Thorns, low-branching
Halesia carolina	Silverbell	X		X			X	X	X	X		
Juniperus virginiana	Red Cedar		X					X	X		X	Conspicuous as evergreen
Malus baccata	Siberian Crab Apple	X		X	X			X	X		X	
Prunus sargentii	Sargent Cherry	X		X				X	X		X	
Rhus typhina	Staghorn Sumac	X			X		X	X	X	X		Vigorous, use in naturalized areas
Syringa reticulata	Japanese Tree Lilac	X		X				X	X		X	
LARGE SHRUBS:												
Hamamelis virginiana	Witchhazel	X		X			X	X			X	
Amelenchier canadensis	Shadbush	X		X		X		X		X		
Ilex verticillata	Winterberry	X			X			X			X	Good in wet areas, winter interest
Cornus mas	Cornelian Dogwood	X		X	X			X	X	X		
Viburnum opulus	European Cranberrybush	X		X	X		X	X	X	X		
Viburnum sargentii	Sargent's Viburnum	X		X	X			X	X		X	Other species may also be used
Viburnum tomentosum	Doublefile V.	X		X			X	X	X		X	

Table 2-2

Initial Recommended Plant List

Table 2-2 (cont.)

		FOLIAGE		ORNAMENTAL CHARACTER				TOLER-ANCE		HISTORIC CONCEPT		NOTES
		Deciduous	Evergreen	Flowers	Fruit	Bark	Fall Color	Sun	Drought	Olmsted Plan	Typical of Era	
MEDIUM SHRUBS:												
Azalea mucronulatum var. Cornell	Mongolian Azalea	X		X				X				
Berberis thunbergii	Japanese Barberry	X					X	X	X	X		
Cornus species	Dogwood species	X				X	X	X		X		Stoloniferous species,use in moist areas and banks
Euonymus alatus compacta	Compact Burningbush	X					X	X	X		X	
Forsythia suspensa	Weeping Forsythia	X		X				X	X	X		
Forsythia x intermedia	Forsythia	X		X				X	X	X		
Ilex glabra compacta	Compact Inkberry		X					X	x			
Kalmia latifolia	Mountain Laurel		X	X								Use in protected areas
Myrica pennsylvanica	Bayberry	X			X			X	X	X		Leaves persistant
Philadelphus x lemionei	Mockorange	X		X				X	X	X		
Spiraea vanhouttei	Vanhoutte Spirea	X		X				X	X	X		
Vaccinium corymbosum	Highbush Blueberry	X			X	X	X	X	X			Successful at Central Park
SMALL SHRUBS:												
Azalea poukhanensis	Korean Azalea		X	X				X				
Azalea Delaware Valley White	White Azalea		X	X				X				
Comptonia peregrina	Sweet Fern	X			X			X	X	X		Possible availability problem
Cotoneaster species	Contoneaster species	X	X	X	X		X	X	X			
Deutzia gracilis	Slender Deutzia	X		X				X	X		X	Leaves persistant
Euonymus vegetus	Wintercreeper		X				X	X	X		X	
Hydrangea arborescens	Smooth Hydrangea	X		X	X			X	X		X	
Kerria japonica	Kerria	X		X		X		X	X		X	Successful at Central Park
Lonicera halleana	Hall's Honeysuckle	X						X	X		X	Vigorous, use for bank stabilization
Potentilla fruticosa	Shrub Cinqueloil	X		X				X	X	X		
Rhototyphos scandens	Jetbead	X		X	X			X	X		X	Successful at Central Park
Rosa rugosa	Saltspray Rose	X		X	X			X	X		X	
Rosa wichuriana	Memorial Rose	X		X	X			X	X		X	
Rosa chinensis minima	Fairy Rose	X		X	X			X	X		X	Other rambling species may be substituted
Spirea x bumalda	Dwarf Spirea	X		X	X			X	X		X	Extends blooming season
Stephanandra incisa	Cutleaf Stephanandra	X		X		X		X	X		X	

also be appropriate. Any variations on the original theme should be consistent with Olmsted design principles.

b) Avoid non-indigenous and specimen materials. There is no historic precedent for planting of specimen individuals; the parts should always be subservient to the whole. Any ornamental detail shall be provided in the mid-canopy level, which includes small flowering trees such as dogwood, crab, and hawthorne.

c) The Park should be planted with a greater variety of trees than that found in typical park plantings of today, following the original Olmsted lists (e.g. sugar maples, yellow birches).

d) Historic precedent indicates mostly deciduous materials with evergreens being present only in the tree layer. There are presently a few isolated evergreens on the site. The Master Plan recommends the use of evergreen trees for specific screening purposes, such as around the maintenance building. Yet, there must be enough in number and sensitivity of location so that they become an integral part of that area's palette, avoiding drawing attention by their presence.

e) The use of flower beds has no historic precedent, except in the area around the Women's Comfort Station as previously mentioned, and so should be avoided. However, if budget and interest warrant, seasonal color may be added by the judicious integration of herbaceous perennials and annuals into the edges of shrub beds. Since they tend to be high-maintenance in nature, it is suggested that their use be limited to areas of high visibility, such as the Women's Comfort Station and the pedestrian entrance plazas.

f) Masses of vegetation are used to create positive spaces by framing views, screening unwanted sights and creating green vertical planes of dense vegetation to act as walls for outdoor "rooms". Natural visual interaction should be maintained from one space to the next, with screening to create intrigue and lead the observer where appropriate, but always with a smooth flow in mind. With the exception of formal spaces such as the Grove and Park Drive allees, plant location shall be naturalistic, with shrub borders undulating and trees carefully placed to appear random.

g) Emulate grove-like groupings of trees as evident in the historic plans and on the site.

h) The quantity of shrub massing suggested in the Olmsted plans may be impractical today in some areas because of maintenance limitations and the public's perception of security. It is appropriate in other areas, however, for reasons such as erosion control and mowing considerations, visual buffers, pedestrian traffic control, and to provide a sense of gateway/enclosure at entrance areas. Restoration of these shrub beds will require a serious commitment from the City to an improved maintenance program staffed by personnel with horticultural expertise.

i) Sensitivity to the different functions and maintenance levels of individual areas shall be used in the selection of specific plant palettes. (e.g. thorny species should not be used near the playground area; aromatic species are appreciated only in areas of major pedestrian traffic; some areas require more complete visual screening than others, etc.)

j) Species selection shall also consider availability, maintenance factors, and tolerance to the adverse conditions (sun, wind, drought, soil compaction) on the site. Historically the small shrub layer (under 5') appears to have been composed of high-maintenance types; following the lead of other Olmsted restorations, durable low-maintenance shrubs such as those listed in Table 2-2 are chosen instead, still ensuring that they are compatible with the overall design concept.

The old field habitat (dry, infertile, exposed) duplicates in many ways the cultural conditions found at Kennedy Park and has thus been used as a model for choosing appropriate native species, such as Sumac and Sweet Fern. On the other hand, the relatively new urban environment precludes use of some of the native species selected by the Olmsted firm, and so those that have proven hardy in the city surroundings are given high priority.

k) Choice of species shall avoid past "mistakes". e.g. Although the original plan called for Pin Oaks to be planted in the Concert Grove, they failed in that location, presumably because of the high intensity use and consequent soil compaction. A subsequent planting of Silver Maples was also unsatisfactory, since they are weak-crotched trees and damage easily. Therefore, another species shall be chosen which is resistant to the adverse conditions of the location, while still

creating the same spatial effect (refer to Implementation Program, Middle Section, for additional recommendations for this area).

3. More than any other element of the Park, the trees, shrubs and grass require a new commitment to maintenance. Section 5.00 and Appendix A provide examples of detailed horticultural care programs. Each planting should include costs of maintenance in the budget.

4. Some detailed planting recommendations are presented in Section 3.00 Implementation Program, and will be further developed in future Site Designs.

2.05 SITE FURNISHINGS

A. HISTORICAL CONCEPT

As with the overall landscape, much can be learned about the original site furnishings of Kennedy Park through careful study of postcards, photographs, letters, and other written documents of the time. Remnants of some of the furnishings, such as light pedestals, still exist in the Park and are helpful in reconstructing the past. An extensive research analysis of this is found in the "Historic Furnishings Report"(10).

The Olmsted recommendations for site furnishings were consistent with the basic "Seven S" design principles, in both the locations and choice of styles. That is, the furnishings were chosen to be subordinate to the whole design, enhancing the feeling of the spaces; consistent in style with each area and the different site usages; serviceable and convenient to the users, and so on. Once again, the Master Plan recommendations will focus on recreating these concepts as faithfully as possible.

B. MASTER PLAN PROPOSAL

ISSUES

The existing conditions are documented in detail in the "Historic Furnishings Report". In brief, the site furnishings providing amenities for users (benches, trash cans, lighting, fences) are sparce and/or inappropriate in placement or material. The original graceful furnishings are non-existent, replaced by serviceable but harsh, modern fixtures.

The recommendations herein are based on those of the "Historic Furnishings Report" and its in-depth site evaluation. The

methodology used for choosing style types is to use historic photos, etc. as prototypes, and search current catalogs, many of which have historic reproduction sections, for facsimiles that are reminiscent in design character of the original objects.

While the goal is to recreate Olmsted's South Park as closely as possible, it is recognized that changes in socio-economic need and recreational activities have changed some of the Park's functions. Accordingly, it may be necessary to include some modern fixtures, such as ballpark floodlighting and chain link fencing.

However, the location and style of these will be carefully chosen with the "Seven S" principles in mind (page 3, this report), and serious effort made to mitigate their intrusion on the historic restoration. Recommended locations, as shown on Figure 2-9, are conceptual only and final placement and design shall be determined with the specific site design of each area.

RECOMMENDATIONS

1. Lighting - Historic

   a) The Master Plan recommends only one historic fixture style to be used throughout the Park for several reasons: continuity of image and reduction of visual clutter, and ease of ordering and installation of interchangeable replacement parts. The Shepherds' Crook style would be the most pleasing visually, although there is also precedent for straight poles. In either case, it is advised to duplicate the pedestal type found in remnants on the site. A review of catalogs indicates that this will not be difficult, since the original cast iron design was a fairly common one and has been replicated by several companies (Figure 2-10).

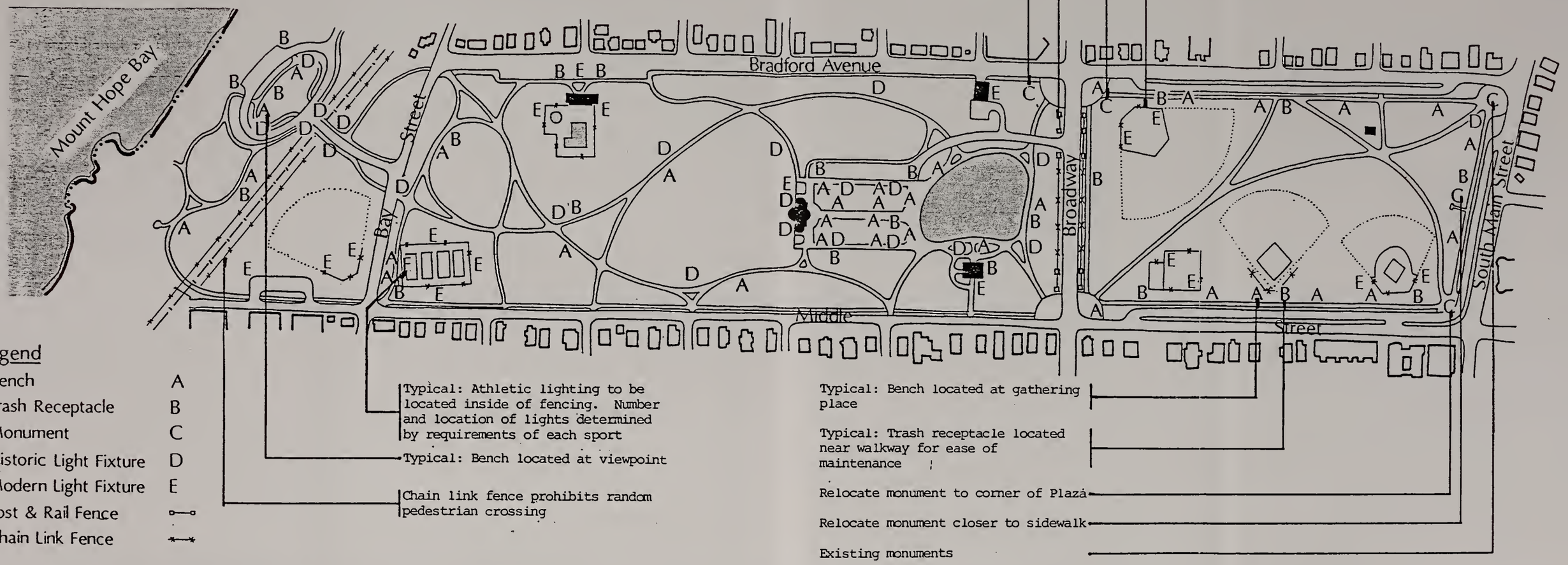
   b) Although South Park was designed primarily for daytime use and thus lighting was kept to a minimum, there are indications of placement in photographs, letters, and design intent of specific spaces (i.e. the Pond/Overlook area and associated parking). The Master Plan recommendation for lighting locations is based as closely as possible on the historic framework (Figure 2-9). New locations are chosen in accordance with current usage and the guiding "Seven S's".

   c) The existing pedestal remnants on the Overlook Shelter foundation shall be removed and stored safely until they are needed for use as a pattern for reproduction. The reproduced multi-lamp fixtures shall be placed on

Scale in Feet

0 75 150 300

Note: Diagrammatical symbols are not to scale. In some instances it may be appropriate to have more than one unit in a specified location. Actual locations shall be sited in the design development of each section


Site Liberty replica
Post and rail/chain link fencing
Monument relocated to incorporate into Plaza setting
Typical: Ballfield fencing limited to infield and foul lines only
Mount Hope Bay
Bradford Avenue
Bay Street
Broadway
South Main Street
Middle Street
Typical: Athletic lighting to be located inside of fencing. Number and location of lights determined by requirements of each sport
Typical: Bench located at viewpoint
Chain link fence prohibits random pedestrian crossing
Typical: Bench located at gathering place
Typical: Trash receptacle located near walkway for ease of maintenance
Relocate monument to corner of Plaza
Relocate monument closer to sidewalk
Existing monuments

Legend

Bench	A
Trash Receptacle	B
Monument	C
Historic Light Fixture	D
Modern Light Fixture	E
Post & Rail Fence	o—o
Chain Link Fence	x—x

Proposed Location of Site Furnishings - Generalized Plan

Figure 2-9

MASTER PLAN FOR

Kennedy Park

OLMSTED HISTORIC LANDSCAPE PRESERVATION PROGRAM

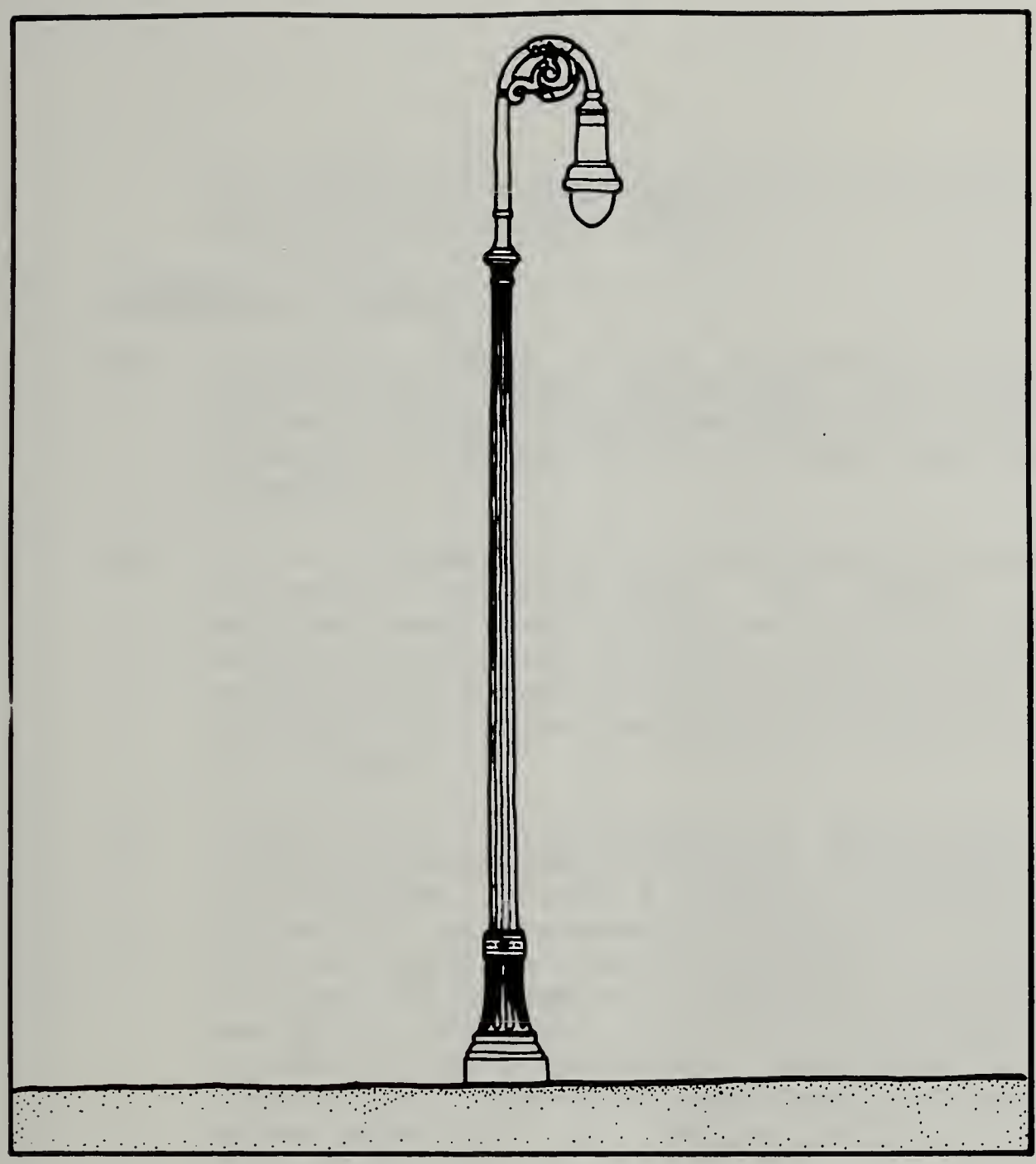
Prepared by

Albert Veri & Associates, Inc.
Landscape Architects/Urban Designers
Providence, Rhode Island

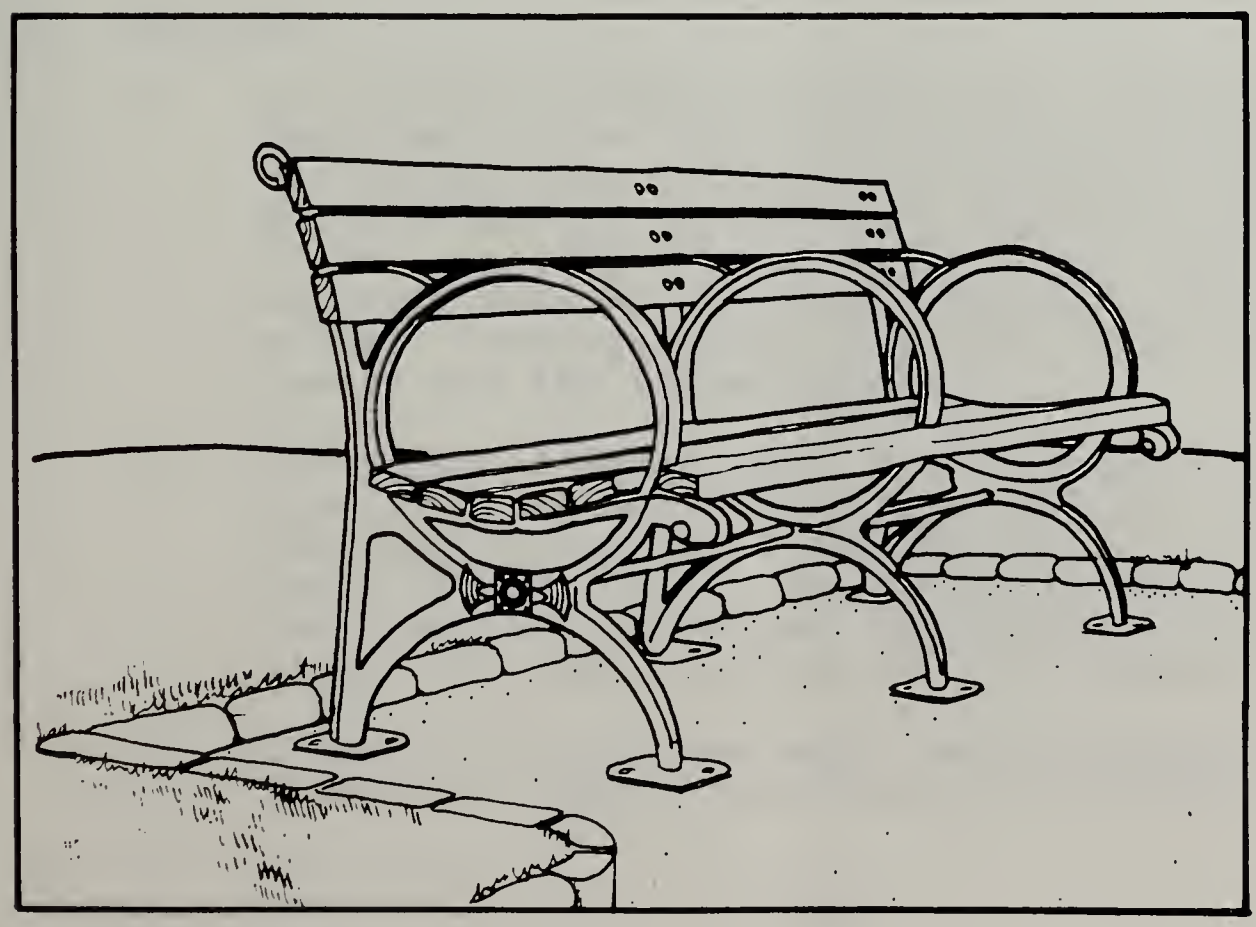
City of Fall River
Carlton M. Viveiros, Mayor

The Commonwealth of Massachusetts
Michael S. Dukakis, Governor

Office of Environmental Affairs
Department of Environmental Management



Historic Light Fixture Reproduction



Pavement & Stylized Historic Bench

Site Furnishings

Figures 2-10 and 2-11

the rebuilt Overlook Structure and also on the bridge to the Shore Section Oval.

2. Lighting - Modern

a) In the play area, around ballfields, tennis courts, and other active areas, floodlight poles should not be informal wooden telephone poles, but black-painted steel or aluminum, for both visual and maintenance reasons.

b) It is recommended that only pedestrian-scale lighting be used in the Pond area. If, however, floodlights must be used, they should be turned on only when absolutely necessary, such as for evening skating, rather than automatically by photocells. Their location is chosen carefully to blend the poles into the trees.

c) Rather than floodlighting the buildings, security lighting on photocells may be strategiacally placed. On the Women's Comfort Station, recessed lights in the porch roof will accomplish this; in the new Overlook Shelter lighting shall be placed in the vaulted ceiling so that the structural arches are highlighted but the source of the light is not directly seen. Likewise at the Men's Comfort Station, care should be taken to reduce glare from the lights and to hide their source, where possible. All fixtures shall be vandal-resistant.

3. Benches

a) The several types of benches used historically are detailed in the "Historic Furnishings Report"(11). Basically, they consisted of light cast iron or steel end pieces with gracefully contoured seats of wooden slats. In 1925 a more utilitaritan bench was used of concrete ends and straignt back and seat, also of wood slats. Catalogs today offer many replicas of both the former and the latter styles.

b) The style of bench shall be in keeping with the specific area and its overall feeling. Thus the Grove and Pond area should have the more graceful, formalized style (Figure 2-11), while in more active area such as the Upper Section around the ballfields, the more rigid, concrete-end type will be appropriate.

c) Placement of benches shall be in logical, strategic locations - where strollers will be pausing to rest, in

specific "passage of scenery" viewing areas and at vista sites, such as the Overlook Structure and the Shore Section Oval (Figure 2-9). They shall be bolted to pavement sections offset from the pathways (Figure 2-11).

d) In areas of high usage where need for extra seating is apparent, it may be appropriate to use "double benches" (back-to-back units). Although there is no historic indication of such here, there is precedent for this type of bench in other Olmsted parks such as Central Park, and the styling is graceful and visually pleasing.

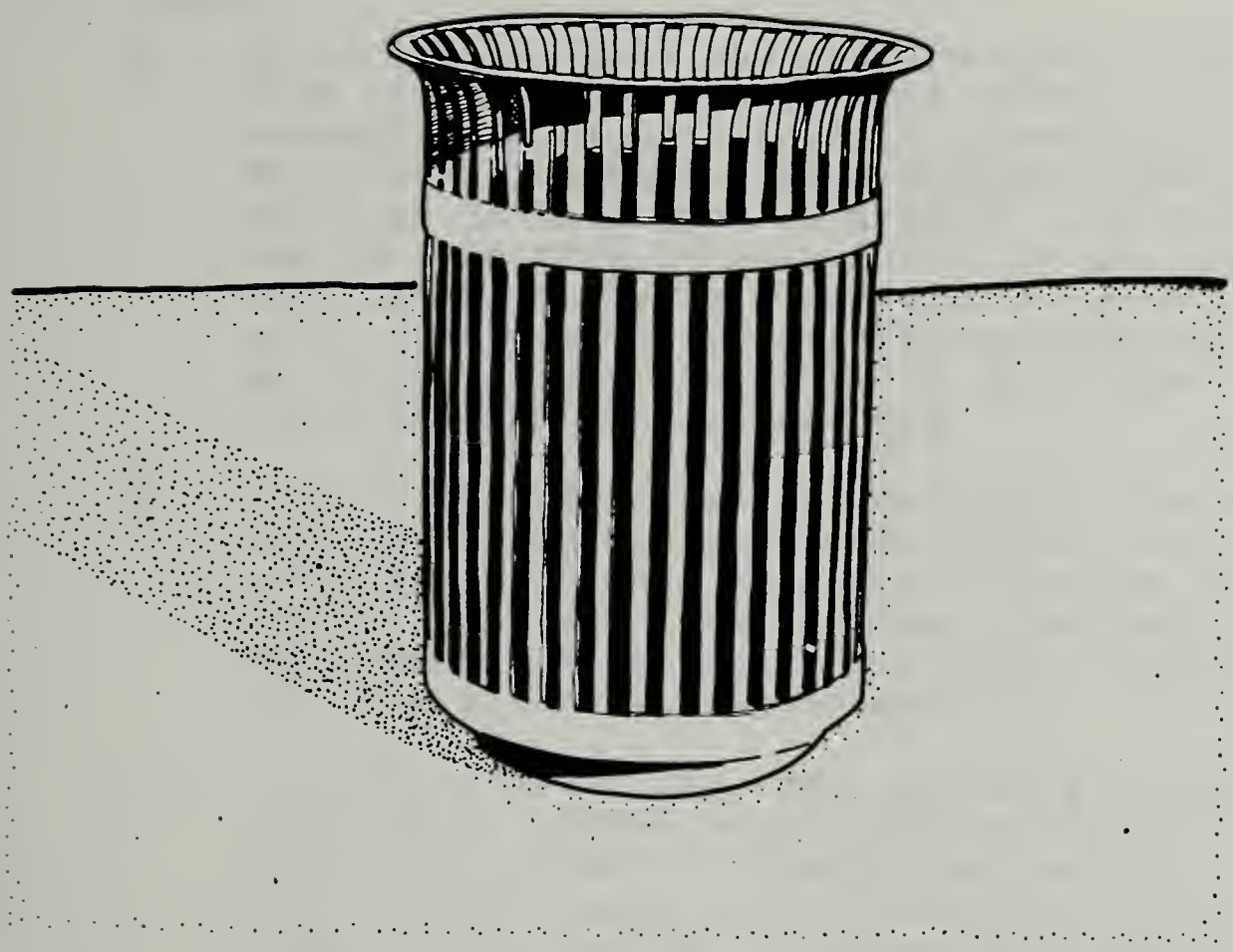
4. Trash Receptacles

a) Although we know that trash receptacles were present historically, there is no record of the style used. The Master Plan recommends a type that will be unobtrusive, and is ensembled with other park fixtures. It shall be durable and affordable, of a style that can be easily maintained and replaced. The specific style recommended is a sturdy yet graceful shell, constructed of vertical steel bars banded together and flared at the top (Figure 2-12). The steel liner shall be permanently installed inside the shell, lined with plastic trash bags for easy collection, and fitted with a cover with hole for trash, attached by steel cable.

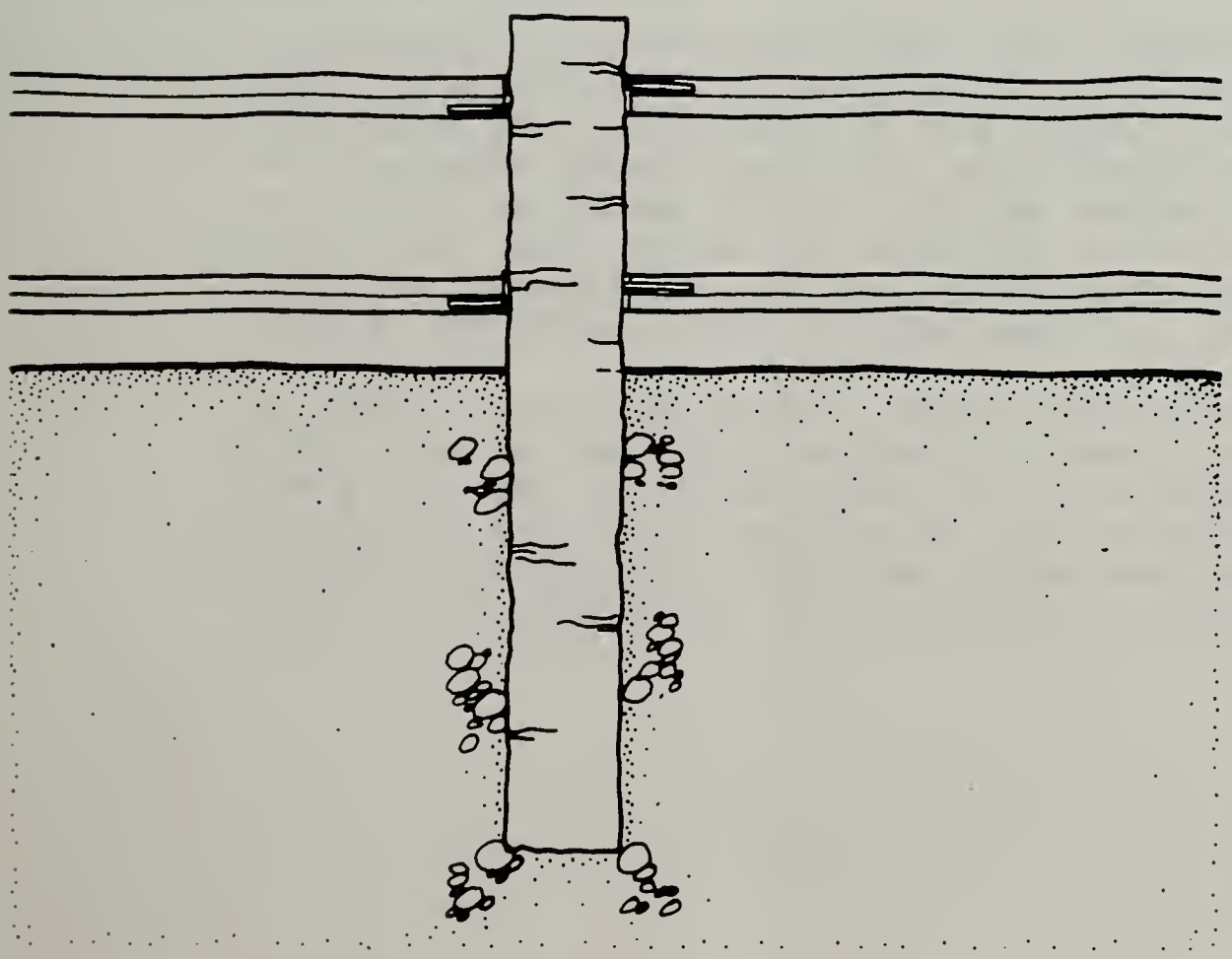
b) Location throughout the Park shall consider both ease of access for emptying by Park maintenance personnel and placement in areas of heavy usage, such as the Pond/Grove area, near the vendors parking, around the ballfields, and at the Shore Oval (Figure 2-9). Many more receptacles than those in place at present are necessary. They shall be bolted to sections of pavement offset from pedestrian walkways.

c) On peak use periods it may be necessary to augment the permanent receptacles with inexpensive ones such as 55-gal. drums (such as those currently in use). We recommend that they be treated as temporary and be removed as soon as they are no longer needed. They should be painted earth tones (brown or grey) and replaced whenever they become unsightly due to vandalism.

Trash Receptacle



Post & Rail Fence



Site Furnishings

Figures 2-12 and 2-13

5. Fences

a) Historically, post and rail fencing as well as wrought iron picket fence was used to control pedestrian/vehicular traffic interfacing along Broadway. The Master Plan suggests that the visible sections in this area be treated with granite post and woodrail fencing (Figure 2-13), at minimum, with the iron picket fence as a prefered alternative. For economy, where the fence will be screened within the buffering shrub beds, a 3-1/2 foot black PVC-coated chainlink fence shall be used.

b) A study should be made to determine the necessity of outfield fences in the Upper Section ballfields, and a serious effort made to remove them, as they completely detract from the intended open greensward effect. When replacement is necessary for other chainlink fences, it shall be black factory-coated PVC.

c) In certain locations, such as the pool area, multilayer planting is historically appropriate and will visually reduce the impact of chain link fencing. However, in other places, such as the basketball and tennis courts, this type and height of fence will only be accented by planting, and thus an attempt at screen planting is not recommended there.

d) Recommended locations for fencing are shown in Figure 2-9.

6. Buildings and Structures

a) The Master Plan strongly urges that plans and specifications for reconstruction of the Overlook Structure and renovation of the Women's Comfort Station be completed immediately, so that they are on file. The Overlook plans should include restoration of the extension walls on either side of the main foundation, with the possibility of the addition of sandstone caps similar to those found on the building foundation.

As funding sources appear, the plans will then be available for application and/or immediate bidding. The plans and specifications shall be prepared by an architect with past experience in restoration of historic structures, and the historian for Kennedy Park shall be consulted in the selection of materials

for approval of architectural style and detail. It is imperative that these buildings be restored as soon as possible, since their deterioration accelerates the longer they are neglected.

b) Also of importance, but less urgent, is the renovation of the Men's Comfort Station. The structure of the building is still intact, however the added shed should be removed or refurbished to conform to the historic structure, and the original trim and detailing on the building should be restored.

c) The swimming pool area shall be visually toned down with the use of earth tones. The replacement of current pavement with cool-deck is recommended. This is a non-glare, non-skid, low-heat surface that has been developed for the safety and comfort of bathers. It will also minimize the visual impact of the pavement from the Overlook area.

d) Maintenance buildings shall be painted in earth tones of matte finish to minimize visual impact.

7. Memorials and Monuments

a) The Master Plan suggests the establishment of a design review commission to ensure that future additions to the Park, such as memorials, are consistent in style and location with the design intent of the Park as a whole.

b) Some of the monuments are recommended to be moved. Their new location is indicated on Figure 2-9.

8. Signage

a) The Master Plan recommends that both regulatory and interpretive signage eventually be replaced with a network of signs uniform in materials, color, and graphics. They shall be conspicuous but not overpowering, following once again the Olmsted credo of parts being subservient to the whole. If they utilize the color scheme of other Fall River recreational facilities, they shall be distinctive, with some graphic element (such as typeface) identifying them as belonging to Kennedy Park.

b) They shall be made of vandal- and weather-resisitant materials that are easily produced. Heights and sizes will be dictated by the function of each sign, with sizes and numbers of signs kept to a minimum.

c) Signage in the immediate vicinity of the ballfields shall be prohibited, to discourage both visually inappropriate advertizing and possesiveness of the fields by the teams using them. Programming of sporting events and other functions should be encouraged however, with a possible kiosk erected in an appropriate location for the announcements of such.

d) There shall be entrance signs announcing Kennedy Park at: the South Main/Bradford Plaza; the Broadway/Bradford Plaza and intersection; and the entrance to the Shore Section. The latter shall clearly identify this lower area as belonging to the Park, with directional signs for adjacent private concerns being both secondary and in keeping with the given design format.

e) A large map of the Park, either an enlargement of the Master Plan or of the 1904 Olmsted Brothers Plan, shall be placed in the Overlook area, labeled with the historic area names (The Brow, The Meadow, The Concourse, etc.). A brief informational discussion of the Park's history and current renovation plans shall be included.

f) It is strongly recommended that the services of a graphics design firm, one familiar with municipal signage systems, be employed to create the appropriate image for this subtle yet important detail of the Park.

3.00 Implementation Program

3.00 IMPLEMENTATION PROGRAM

Implementation of the Master Plan will no doubt be done in stages and on an area-by-area basis. The following recommendations for each of the major areas of the Park refers also to Section 4.00, Budget Proposals and Priorities.

This section of the Master Plan report is organized to conform to the designated areas of the Park: Upper, Middle and Shore. Olmstedian design principles of separation of activities and styles lends itself to these natural separations of the Park, and this is highlighted in each discussion of the recommended improvements.

First and foremost, we repeat the conclusions of the "Site Analysis and Evaluation"(12) that 1) The original design of Kennedy Park has been altered little over the years, 2) the physical condition of the Park has deteriorated to a stage where much of its original usefulness and beauty is gone, and 3) proposed design alterations can be accomplished without impact upon the original design intent.

3.01 PHASE ONE

Approximately $950,000 is available for Phase One improvements.

1. Early Action Project

   87 Acer platanoides "Emerald Queen" Norway Maple 5-5-1/2" caliper were planted and new curbing to protect the edge of the Upper Section was completed in 1986 at a cost of roughly $140,000. This veil of greenery reestablished the visual edge of the Upper Section along Bradford Avenue, South Main and Middle Streets. While everyone realizes that the planting is not yet complete and that planting the Park Road islands will further strengthen the green separation from the City, the Project provided a look into the past, a glimpse of South Park as it probably appeared originally.

2. Phase One/Major Construction

The Pond/Entrance/Broadway area (shown as Area B-2 in Figure 4-1), with an estimated cost of approximately $800,000 has been selected for the Phase One Major Construction Project. This area, in combination with the Early Action Project, the City-sponsored improvements to the Women's Comfort Station, and the cleaning and grading of the Shore Section through a joint proposal with the adjoining developer, will significantly restore a major portion of the Park to the casual observer.

Yet, while it is important to recognize the great advances which have taken place since the Master Plan process began, we must not lose sight of the work yet to be done. More importantly, a new attitude of park management must prevail.

3.02 UPPER SECTION IMPROVEMENTS

ISSUES

The Upper Section of the Park is probably the most heavily used area today, and because of its location adjacent to South Main Street, the most visible. The area was designed as the greensward for active sports, festivals and rallies. Unfortunately, recent domination of the area by league sports gives the appearance of a single-use space.

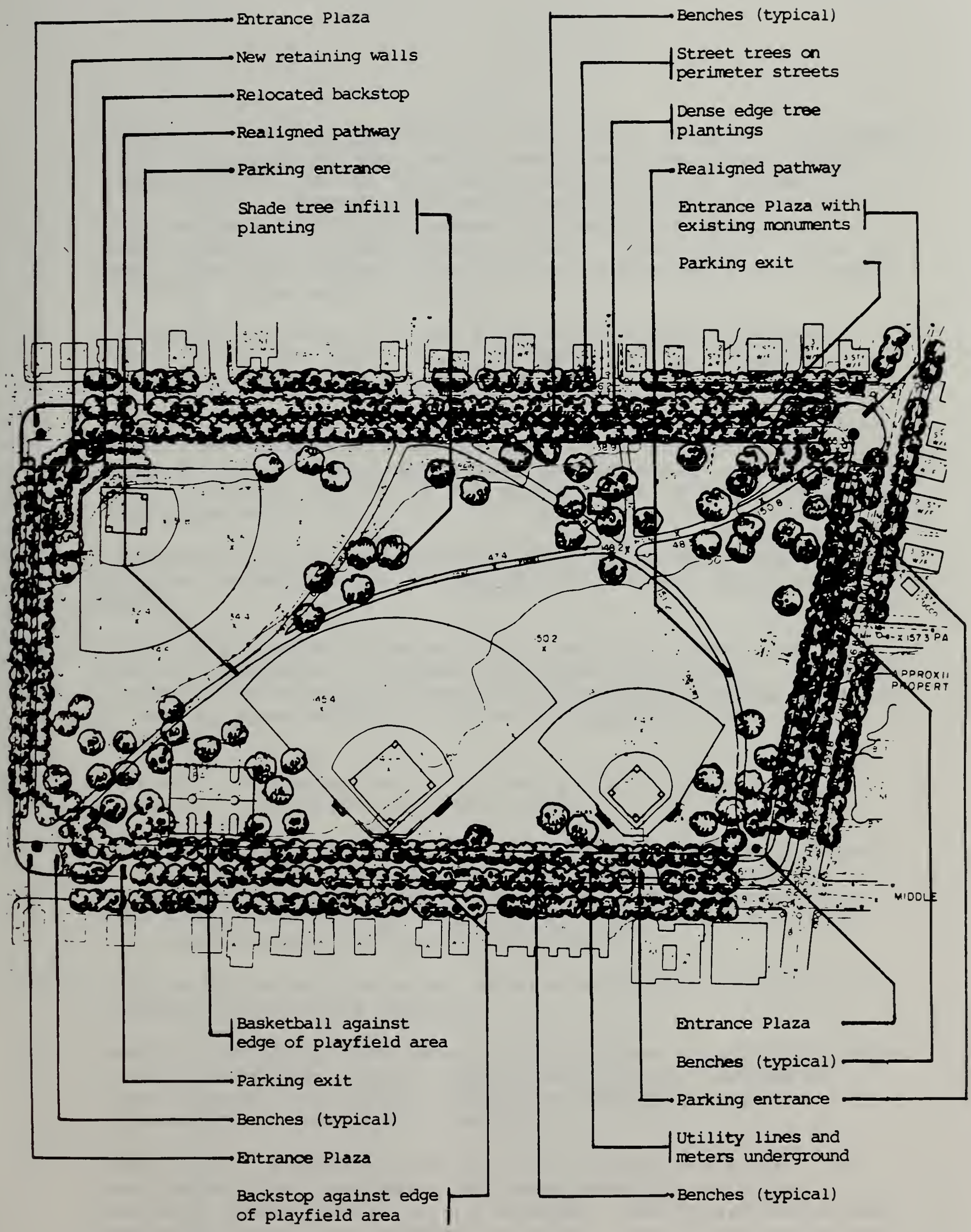
Outfield fences, backstops, and floodlight poles dominate the view. Erosion and poorly maintained turf areas add to the appearance of an over used area. The Basketball courts are popular and require reconstruction and grading.

The Perimeter walkways and through-park curvilinear walks require reconstruction. The Park roads require reconstruction and curbing is needed to protect park vegetation.

The once formal street-side tree plantings have only partially been restored by the Early Action Project. Many of the existing trees worth keeping have been pruned and fertilized. More are needed in the greensward area near entrances and to buffer the reconstructed basketball courts. Shrub plantings and widened pedestrian entrances are needed. The memorials and monuments require a better organized and designed setting.

RECOMMENDATIONS (Figure 3-1)

1. The street-side plantings shall be restored. Planted in groups of like species, Maple, Ash and Oak are recommended



Specific Site Improvements-Upper Section

Figure 3-1

created by the overplanting of any single species. Selected shrub plantings within the islands should be studied with careful consideration of growth height (not to exceed 3 to 3-1/2 feet). Street trees shall be a minimum of 5-5-1/2 inch caliper, uniformly spaced following the spacing established in the Early Action Plan (Figure 3-2). When and where possible, street trees should be planted across from the Park on perimeter streets.

2. Informal plantings of shade trees within the greensward shall follow the plan. Linden, Maple and Oak (high-branching trees) are recommended (Figure 3-3).

3. Park roads shall be reconstructed, catch basins and curbing added where presently none exist. Clean and flush existing catch basins. A one-way roadway system shall be signed, and the slip-in/out entrances and exits moved at least 100-feet from intersections.

4. Designate a portion of the Park Road along South Main Street for the Farmers Market. Include policing and clean-up on bonds.

5. Entrance plazas at intersections should be paved with special pavements. Benches and trash units added. Provide interpretive signage. Locate outstanding monuments existing or new to these entrance plazas to highlight the area. Floodlight.

6. Pavements and detailing of pathways shall follow the hierarchy illustrated in Figure 2-3.

7. Reconstruct and relocate Cupelo Field and Basketball Courts in accordance with Master Plan. At Cupelo, provide low terraced walls with shrub plantings to reduce maintenance. Take positive action to redesign the ballfield to rectify existing drainage and erosion problems.

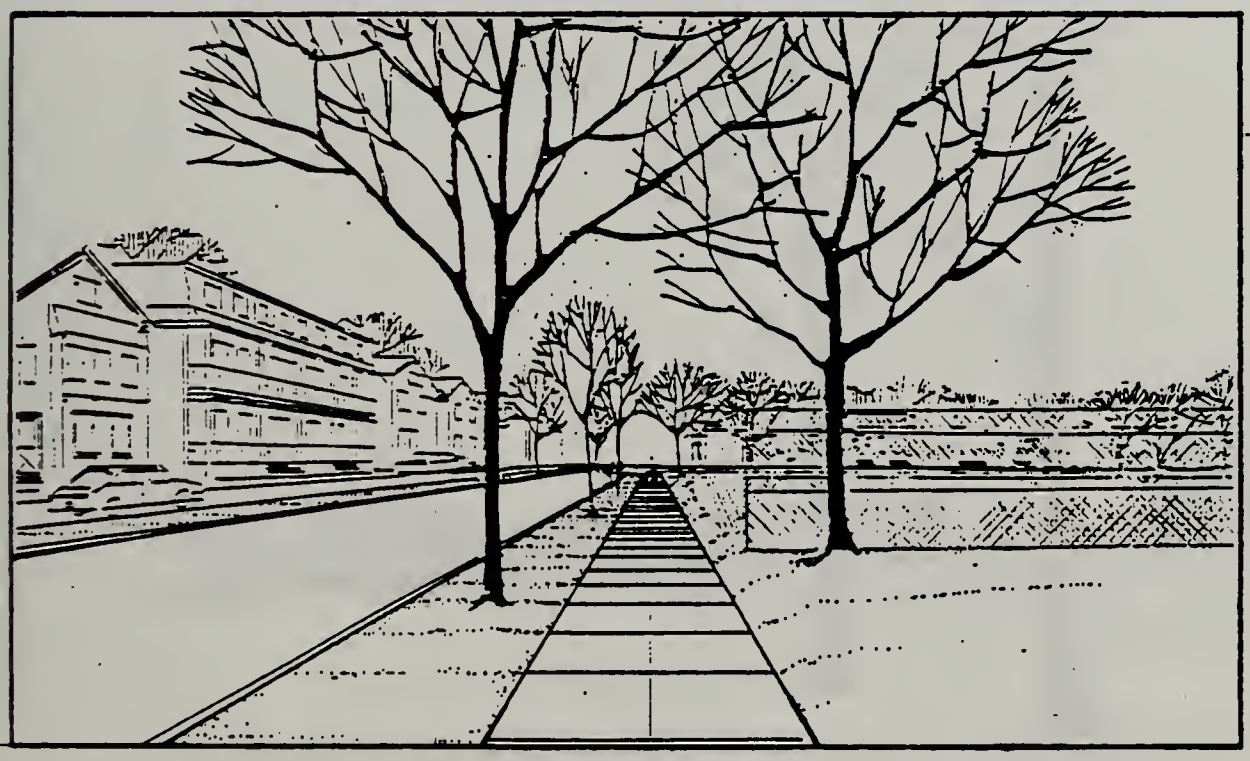
8. Provide high-pressure water service and hose bib system to accommodate watering system.

9. Renovate existing lawn areas in accordance with Section 5.00 of this document. Start regular maintenance service on these heavily-used areas. Consider charging leagues annually for a portion of costs.

10. Ballfields: Floodlight poles shall be painted black. No new fences shall be added, and when possible existing outfield fences should be eliminated. Remaining fences and backstops should be replaced by black, factory-coated-p.v.c. chain link.

Historic Design

In the historic design, trees lined the Park Drive and sidewalk for an attractive promenade around the playfields.



Existing Conditions

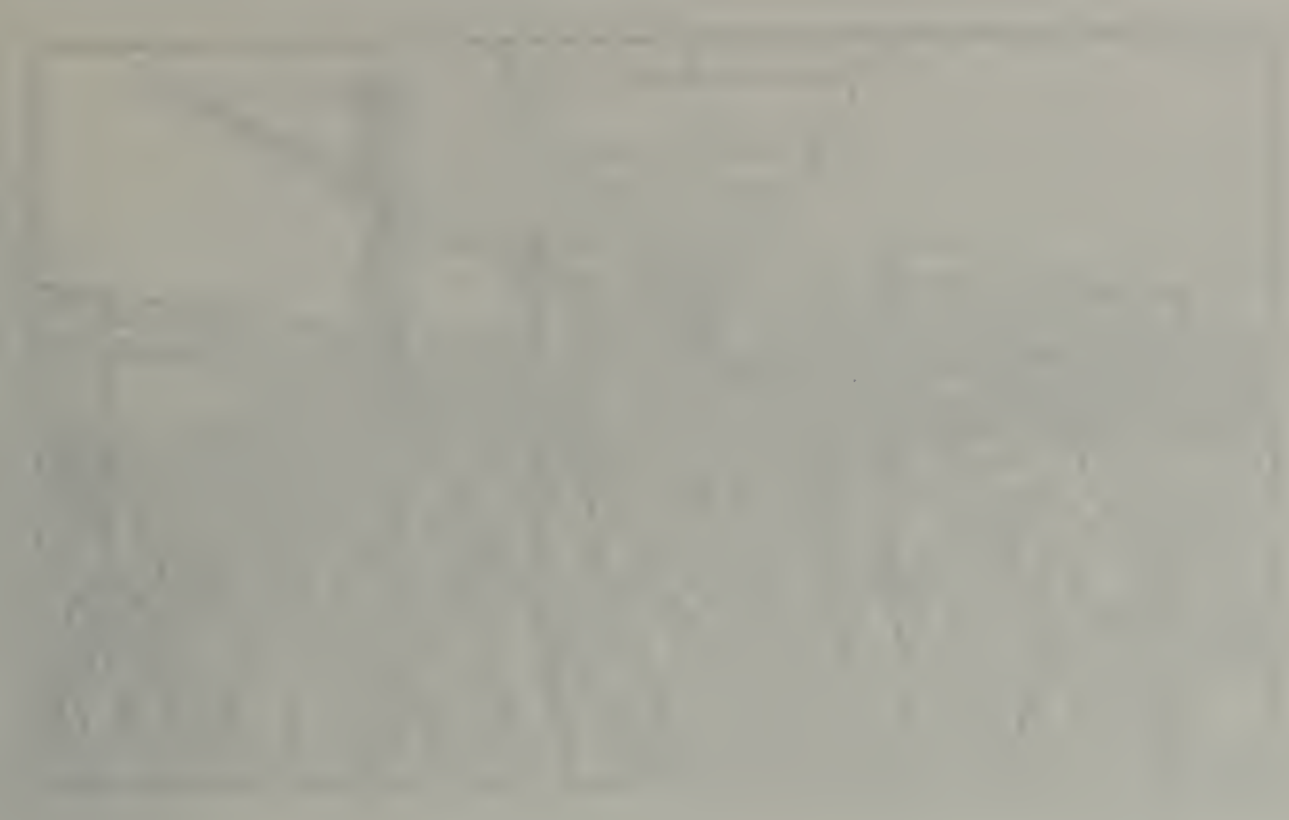
Trees are sparce. Buildings and roads dominate the edges.

Master Plan

Dense tree plantings are established. Fences and backdrops blend with the edge vegetation.

Sidewalk - Upper Section

Figure 3-2



Historic Plan

In historic design, dense planting enclosed the playfields.

Existing Condition

In current conditions, the Upper Section is open and exposed with space interrupted by fences.

Master Plan

Edge tree plantings and groves associated with the path system are reestablished.

Playfields - Upper Section

Figure 3-3

11. Light perimeter walks with equally spaced, historic, pedestrian-scale lights. To preserve the uninterrupted expanse of greensward, the central walk shall have no light fixtures. Floodlighting of selected areas/monuments shall be carefully limited to entrance plazas.

3.03 MIDDLE SECTION IMPROVEMENTS

ISSUES

The Middle Section is the largest section of Kennedy Park. It includes the area between Broadway to the East and Bay Street to the west and it is bisected by an abrupt change in elevation, resulting in two distinct areas with differing character and use.

The upper area of the Middle Section, the Overlook/Pond Area, was originally intended for women and children. It included the Pond which was designed for wading, model boat sailing and skating, as well as for the dimension and interest that its sparkling, passive quality added; the Grove of formally-spaced trees which provided shade and a place for concerts and sing-a-longs; the Overlook Structure with its shaded sitting area for viewing an enframed vista of the lower half of the Park and the Bay beyond; and the Women's Comfort Station building.

Because of neglect, vandalism, and deterioration, the usefulness and quality of experience these spaces provided has been lost. The Women's Comfort Station has been damaged by fire, restored and damaged again by fire. The Overlook Structure's wooden roof and its supports have been destroyed by fire.

The lower area of the Middle Section includes the Knoll, the Meadow and the Brow. The Knoll and Meadow portions were intended to be separated from the Brow and the Overlook/Pond Area physically by the carriage drive and visually by trees and shrubs. Only from one vantage point was there a direct view from one space into the next. This physical separation and sense of separation created enclosed pastoral spaces that simultaneously piqued the visitor's curiosity and invited movement and exploration.

Today, however, the Knoll and Meadow portions are indistinct, undefined expanses without the integrity originally intended due to neglect and vegetation loss. Additionally, a swimming pool now awkwardly occupies an area of the once pastoral Meadow.

RECOMMENDATIONS (Figures 3-4 and 3-5)

1. The Park Road entrance to the Overlook area is a traffic hazard in its present location. A safer, alternative proposal is shown in Figures 3-6 and 3-7.

2. The maintenance building/service area parking shall be screened from view within the Park, using large massings of shrubs and trees, rather than specimen plantings, to avoid calling attention to the area.

3. There shall be a dense buffer-zone planting along the Broadway edge of the Middle Section, using multiple layers of plant material with an undulating, naturalized edge, consistent with the 1904 plan. Because there is no topographic separation of pedestrian and vehicular through-traffic and since Broadway is now a heavily traveled thoroughfare, this recommendation should be a priority.

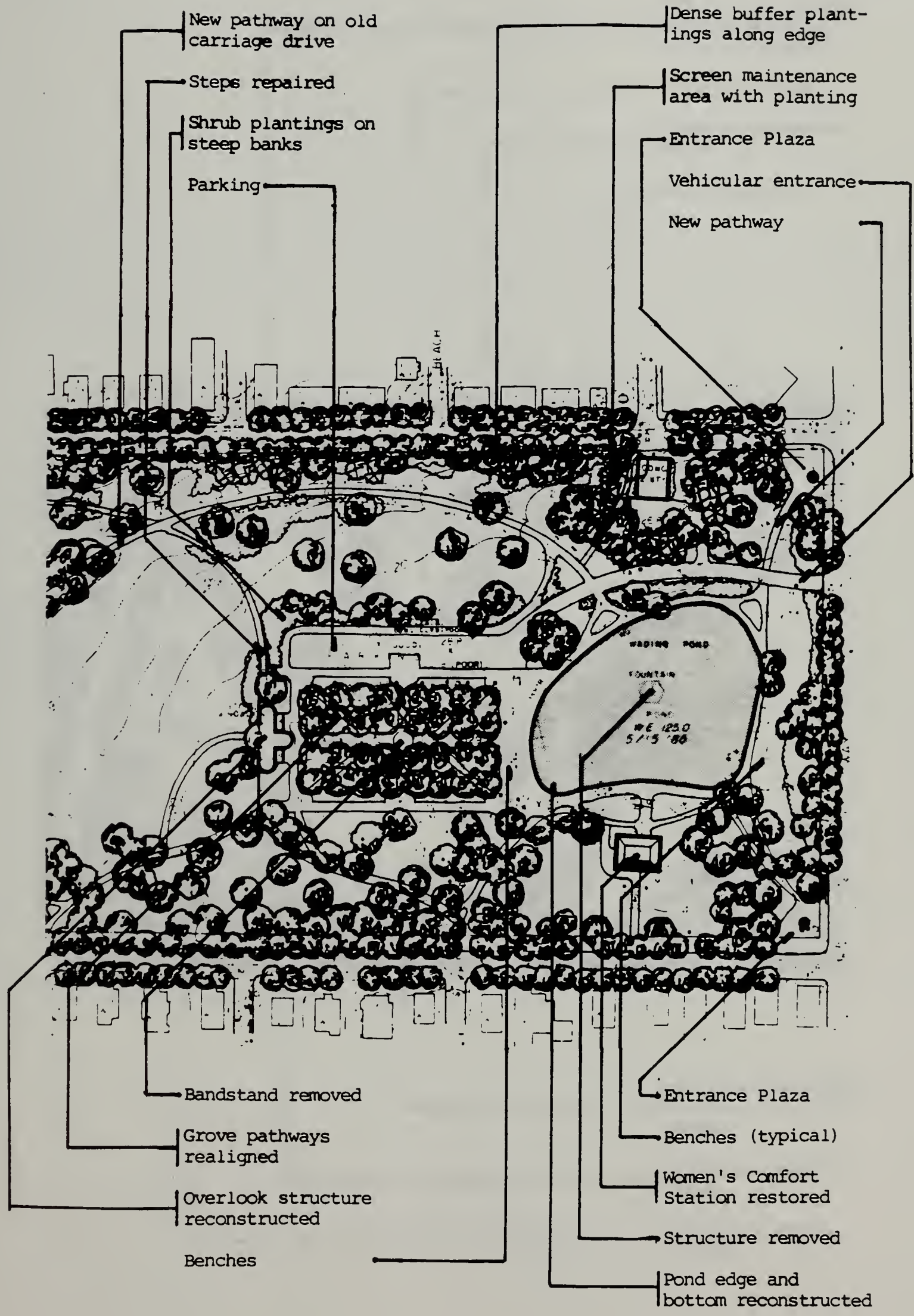
   The buffer will reduce the hazard of pedestrian traffic across Broadway in non-crosswalk areas, as well as help to define more positively the space associated with the wading pool, visually screening and reducing the noise factor of passing traffic from the interior.

   Experienced by the driver, the dense containment of green on either side of Broadway (provided on the east side by a double row of street trees as per the plan) will create a sense of the cool underpass that surely would have been recommended by the Olmsted Brothers if it had been feasible. Yet since, in today's environment, the Park is experienced primarily by those passing through in automobiles, the screening shall remain open at either end and in selected sections so that travellers can see into the Park, glimpsing the Pond and feeling the sense of inviting green spaces therein.

4. The Pond shall be completely reconstructed, decreasing the depth to a maximum depth of 16 inches. A new edge shall be installed to replace the existing, deteriorated edge and to allow easy access by skaters (Figure 3-8).

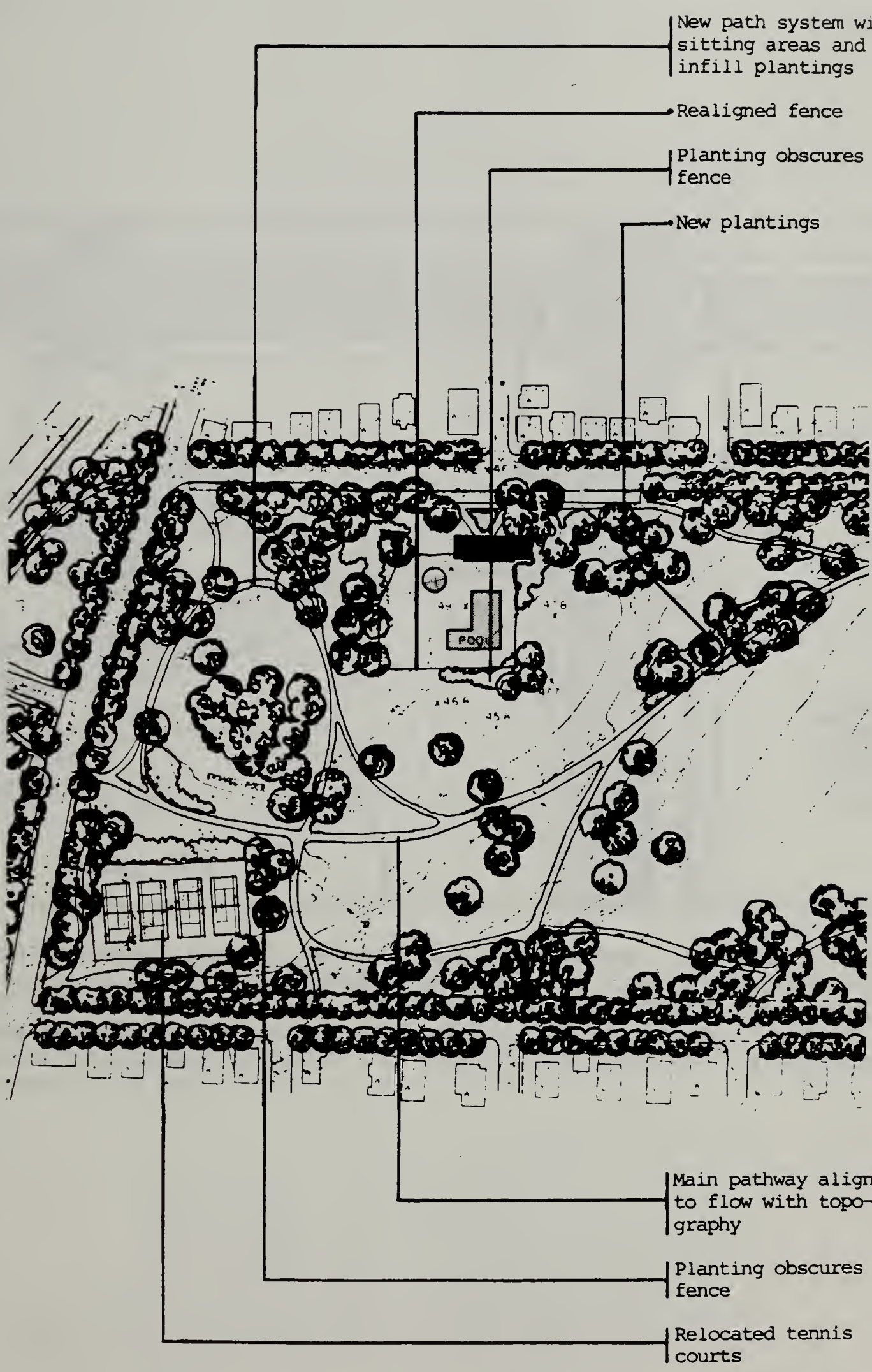
   Provide water quality that is satisfactory to City Health Department.

   Floodlighting the Pond for evening ice-skating shall be carefully controlled. Use of colored lights shall be avoided.



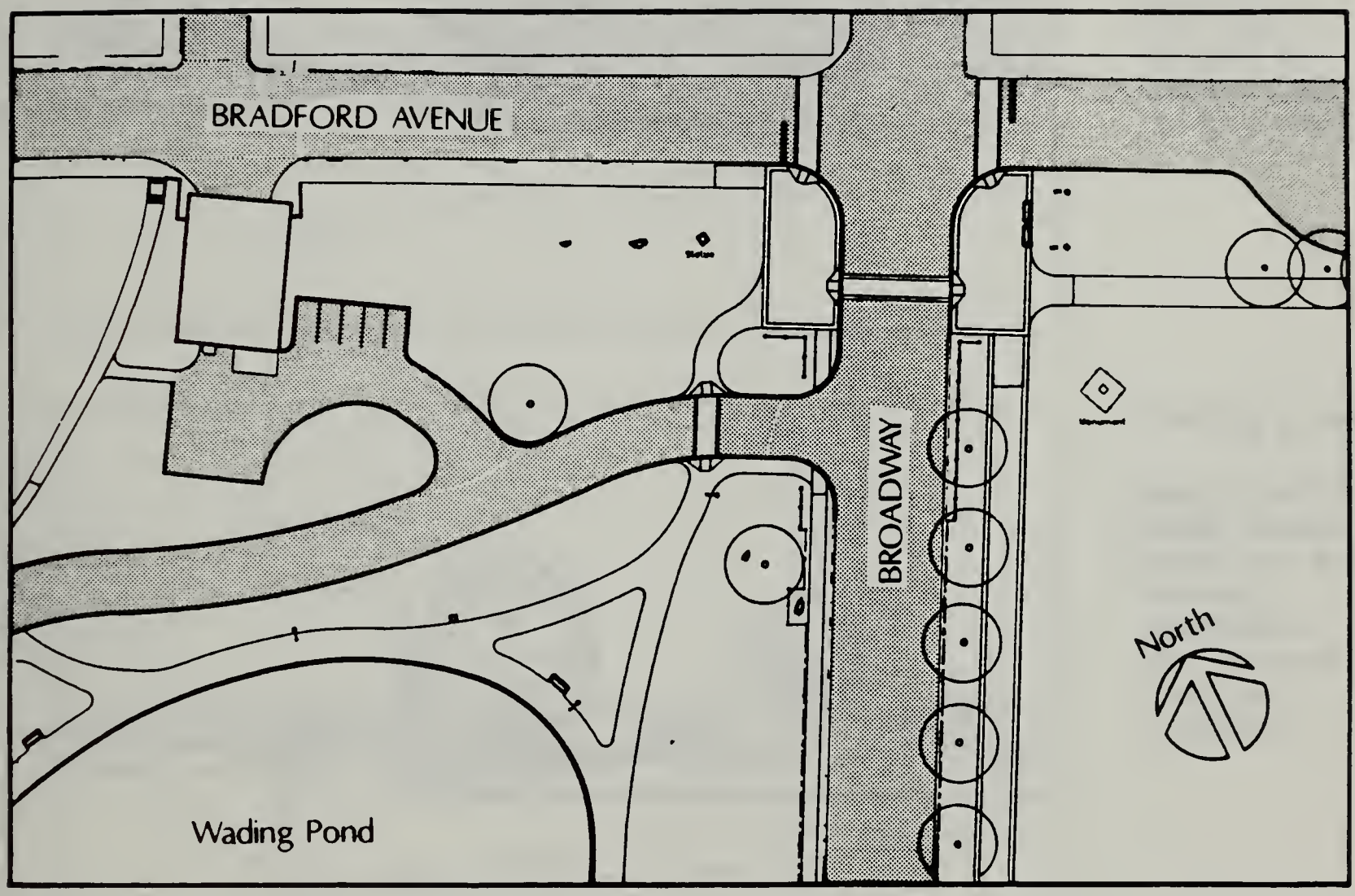
Specific Site Improvements-Middle Section

Figure 3-4



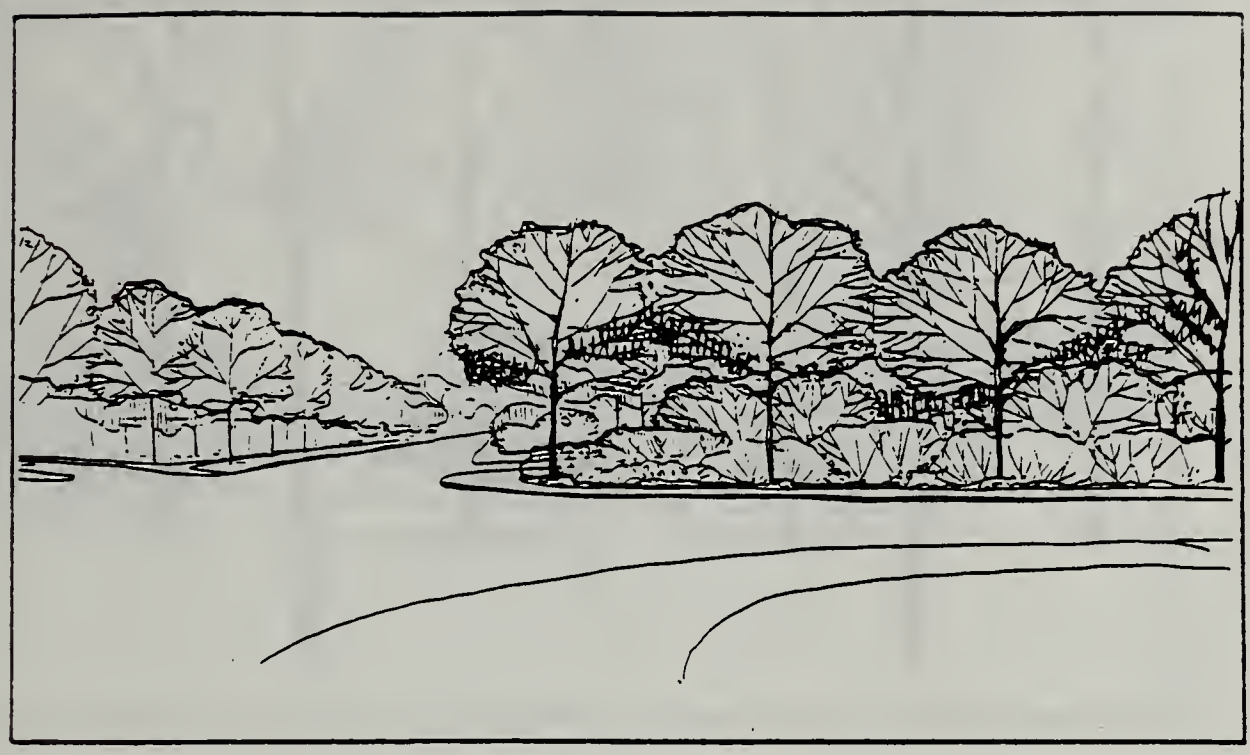
Specific Site Improvements-Middle Section

Figure 3-5



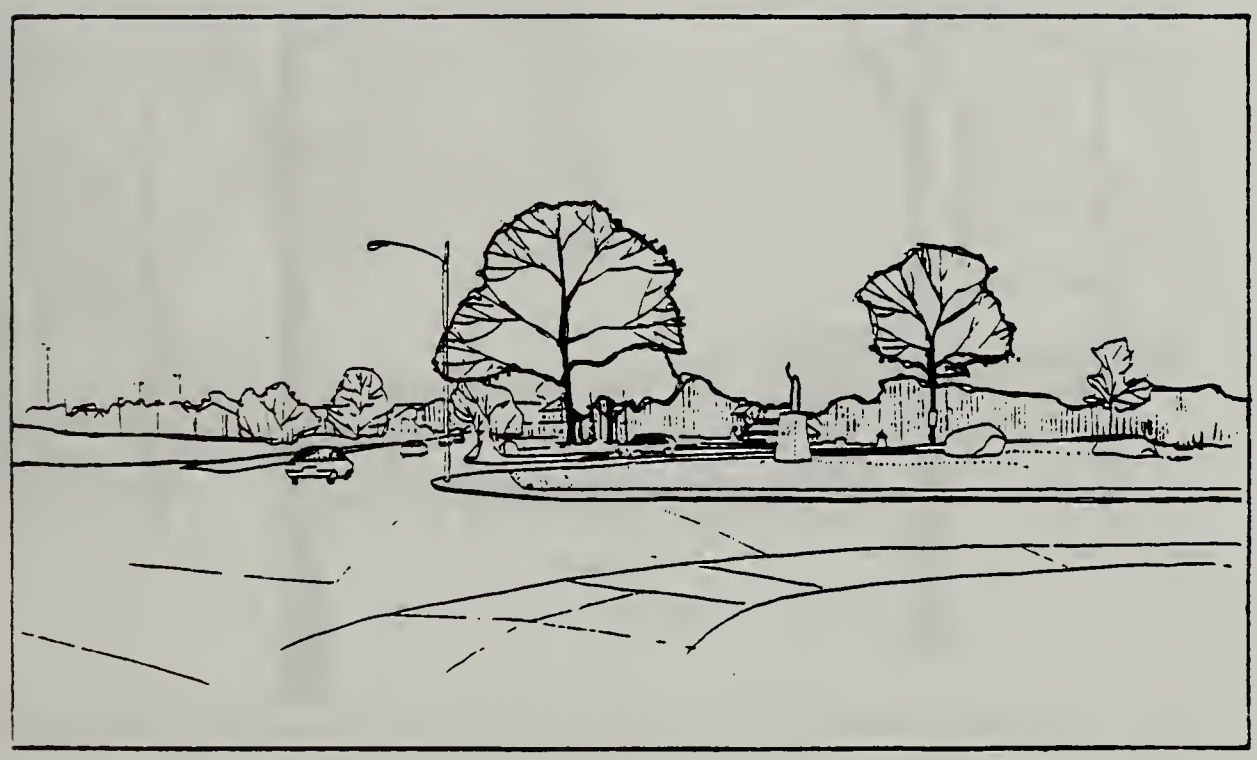
The Park Entrance Drive will be realigned, and relocated to a point 100'± south of the Bradford Avenue/Broadway intersection, thus reducing the hazards of this congested intersection. The relocation will increase the safety of automobiles turning into and out of the Park, and separate vehicular and pedestrian traffic at this point. In addition, the pond will be more visible upon entering the Park.

Entrance Drive Realignment - Middle Section Figure 3-6



Historic Plan

In historic design, the vehicular entrance to the Middle Section is informal and "played down".



Existing Condition

Heavy traffic makes access difficult and without vegetation the entrance space is undefined.

Master Plan

Plazas at corners make clear entrances. Relocated drive improves traffic flow.

Entrance Plaza - Middle Section

Figure 3-7

Historic Plan

The historic planting concept provided a dense buffer and backdrop for the wading pool.

Existing Condition

Area is exposed and pool and pavements deteriorated.

Master Plan

Pool and pavements are repaired or replaced. A sitting area overlooks the pool. Planting provides a back-drop and screen but allows selected views from Broadway.

Wading Pond - Middle Section

Figure 3-8

5. The Grove of trees near the Overlook needs to be replaced completely. New trees, at least 6-6-1/2 inch caliper should be planted in oversized plant pits, well-drained plant pits, using subdrains if necessary. High-canopy trees tolerant of soil compaction, like American Ash or Tulip Tree, are recommended. The specimen Silver Maple on the north side of the Overlook Shelter is not included in this replacement, and shall remain.

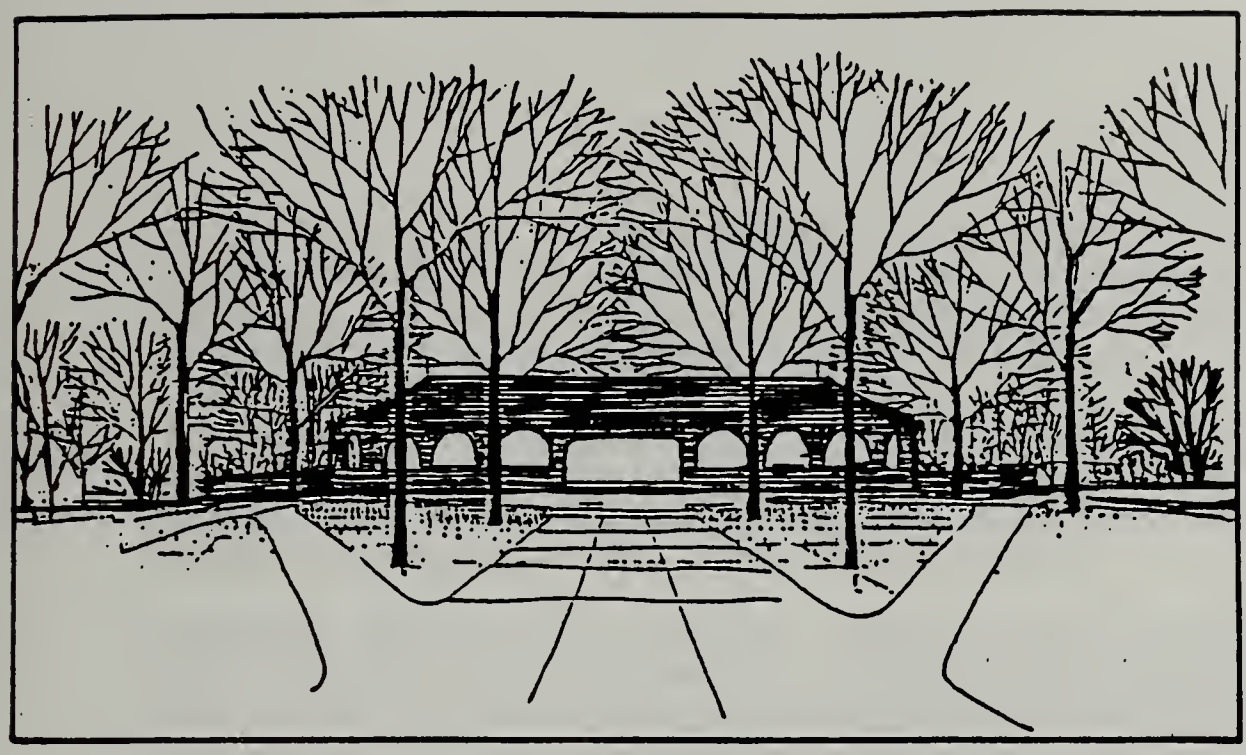
   The bandstand shall be removed. The walkways shall be wide and simply detailed. They shall be realigned to be symmetrical, in the classical "goosefoot" pattern popular for groves during that period. Benches, lighyts, and trash units should be located off the walks to provide comfort of movement on the paths, with the pavement material extending underneath the offset benches. Placement and spacing of the furnishings should ble uniform and reflect the formal quality of the place.

6. Overlook structure shall be reconstructed and restored. Further study is required to determine appropriate alternative for enclosure (Figure 3-9). Castings should be made of the remains of the original light fixture to replicate it as closely as possible. Pavement in this area shall provide a proper setting for the structure, be well-lighted and be sensitive to access to the structure. Special precautions shall be taken to protect the above-mentioned specimen Maple during the construction process.

7. The Women's Comfort Station building must be restored as a priority to prevent further damage and deterioration. The Mayor's Office has initiated efforts in this direction. These efforts can be coupled with the efforts of private-interest groups such as the Massachusetts Commission for ther Blind to provide a food service there and ultimately be responsible for portions of the building maintenance.

8. The parking area is the paved surface of the original carriage area. Pavement should be striped and new curbing and pavement should reflect the quality of the Overlook/Pond area. Floodlighting the parking area is not included.

9. Tennis courts should be relocated in the future when they are to be renovated. Figure 3-5 shows the proposed relocation closer to Middle Street. Fencing should be black factory-coated pvc, and lightpoles shall be painted black. Tree, shrub ,and understory plantings shall be used in naturalized groupings to screen and buffer the courts from view.

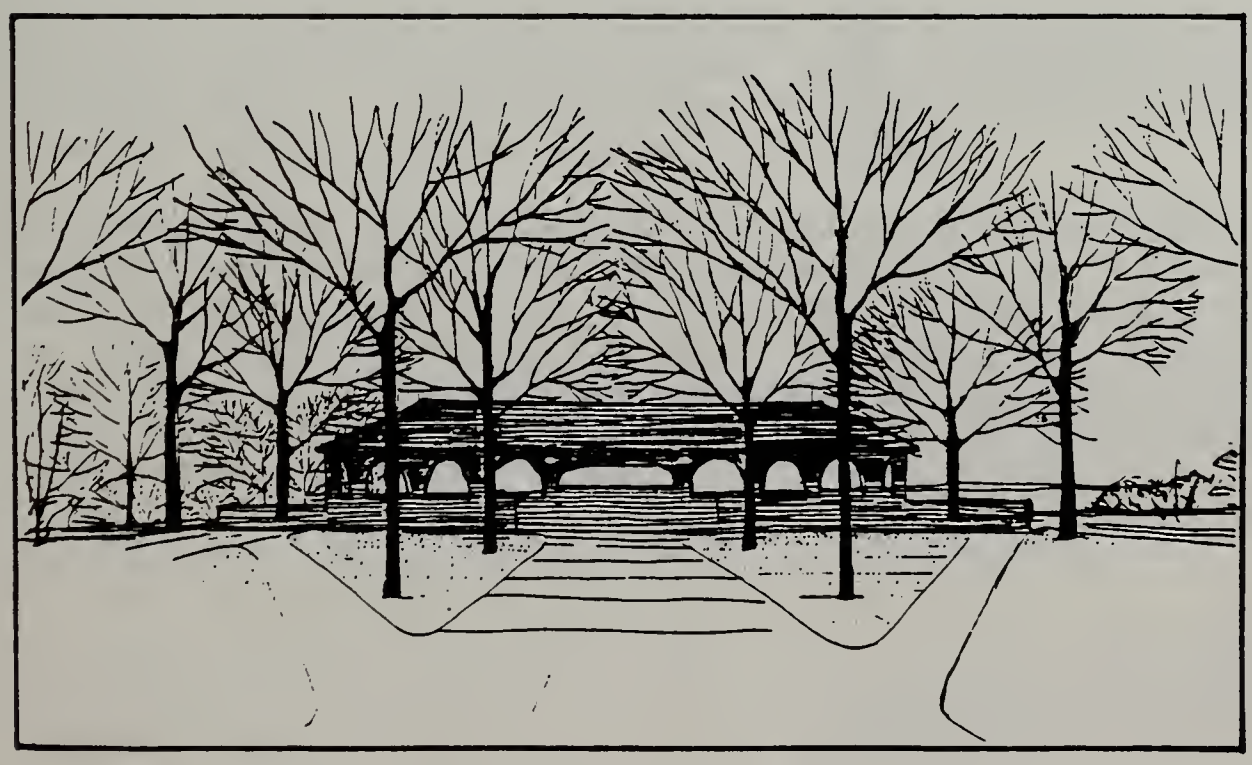


Historic Plan

Historic building and planting concept.

Existing Condition

Overlook foundations and platform..

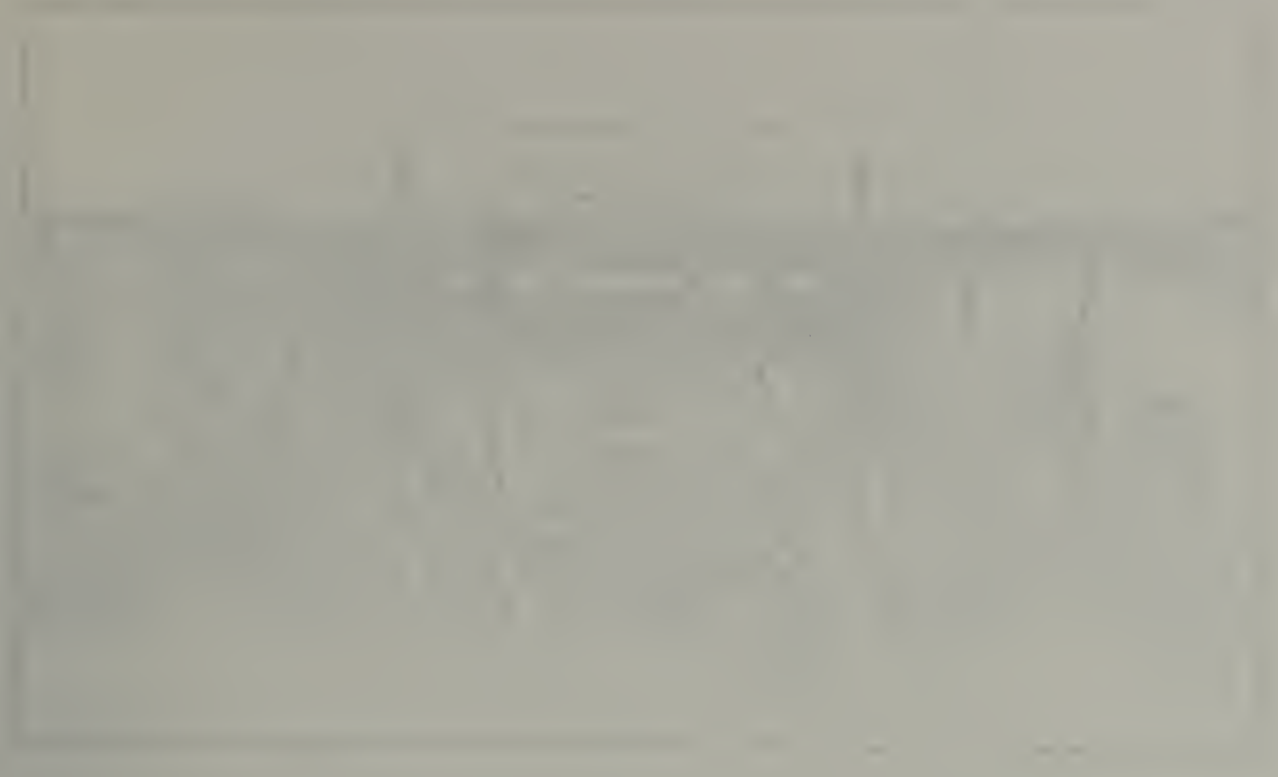


Master Plan

Construction of building similar to historic structure.

Overlook - Middle Section

Figure 3-9



At such time it is recommended that parking be eliminated within the Park in this area, since there is sufficient space on the street and this type of paved surface is inconsistent with historic park design.

10. The swimming facility should be renovated. Outer fence shall be eliminated and the pavement colorcoated to reduce glare. The inner fence should be replaced with a black, factory-coated p.v.c. chain link fence.

    Proposed plantings of trees, shrubs and understory areas for the swimming facility will not only effectively screen it from view (Figure 3-10) but will also be consistent with the historic plan by contributing to the spatial separation of the Brow and Meadow areas.

11. Renovate lawn areas in accordance with Section 5.00.

12. The original carriage drive shall be repaved for use as the major pedestrian walkway through the Middle Section. Lighting is not a priority, although it is strongly recommended.

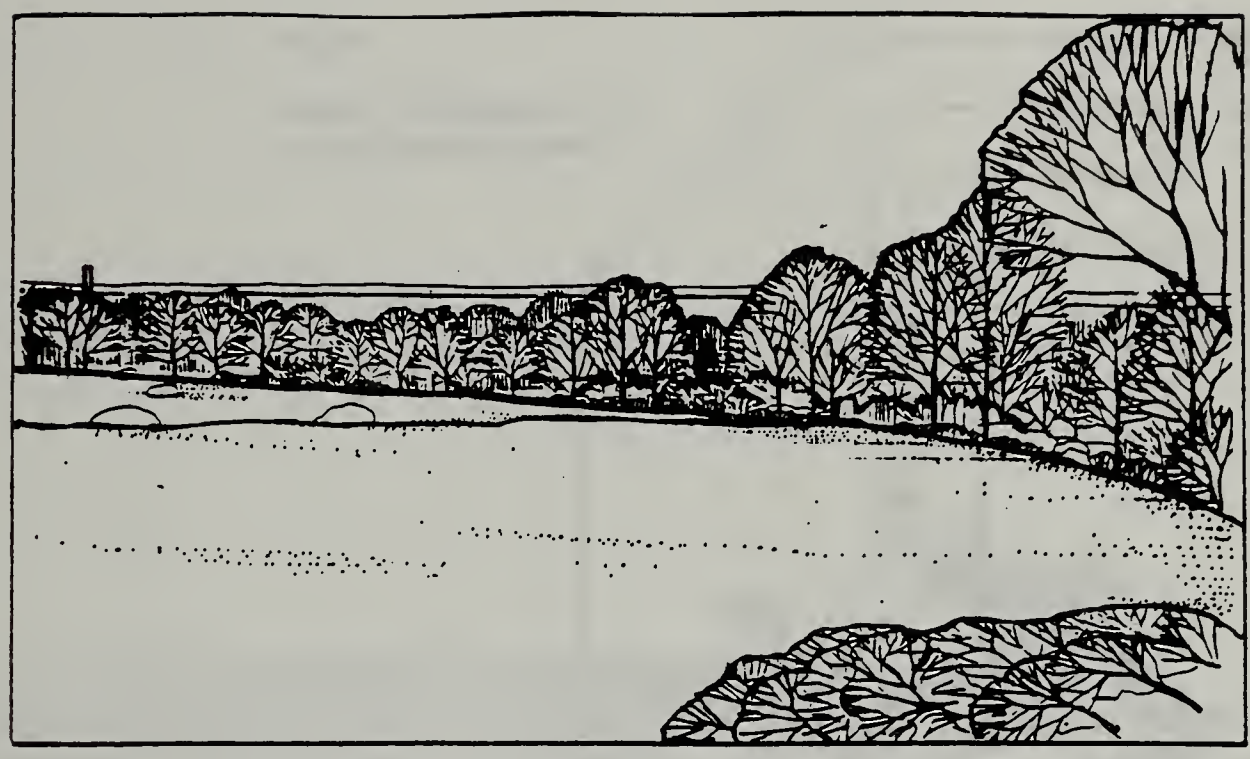
    Bollards shall be placed at the top and bottom of this pathway to prohibit unauthorized automobile usage. While it is recognized that paving a path of this grade encourages misuse by bicyclists, skate boarders, and roller skaters, the installation of intermediary bollards is not recommended due to the increased hazard they could present.

3.04 SHORE SECTION IMPROVEMENTS

ISSUES

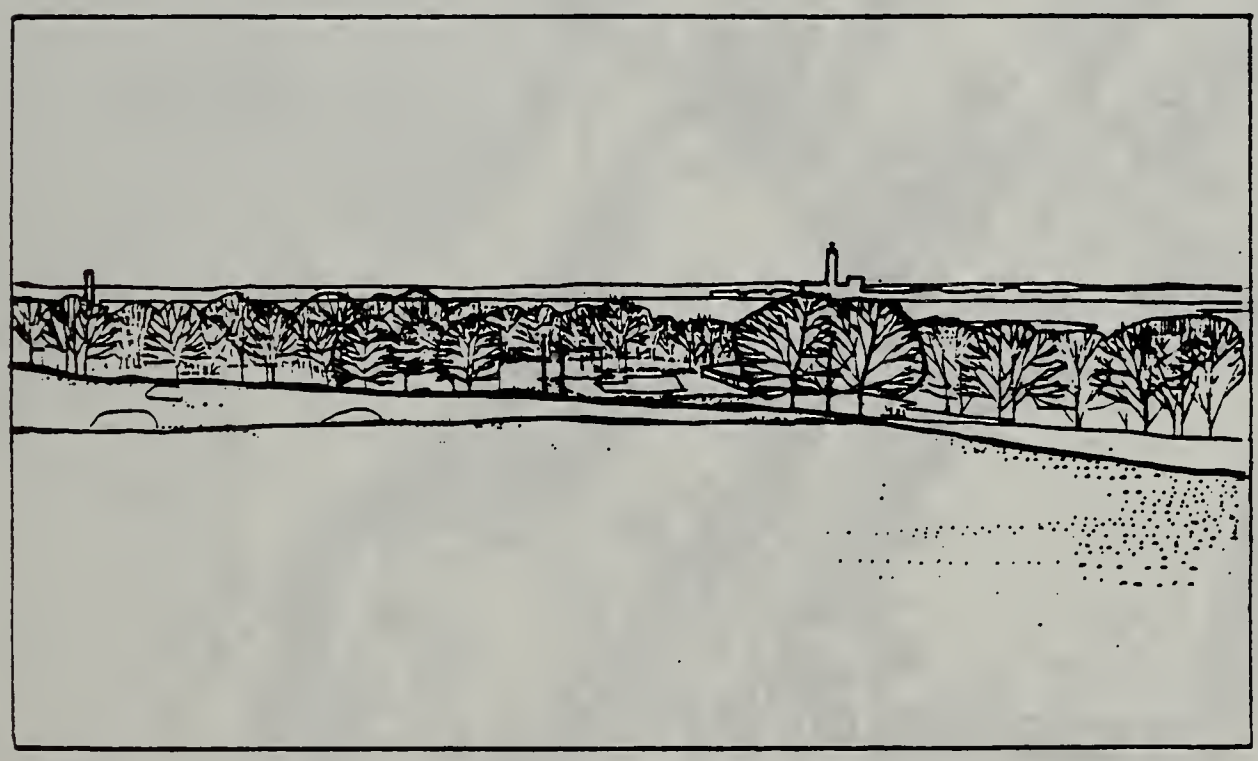
The Shore Section is bisected by the railroad right of way. The portion along the water is the least developed and most in need of attention. The importance of this Section to the Park's final design layout should not be overlooked.

Although this is the smallest section of the Park, by its waterfront nature its development will have a most significant effect on the character of the whole Park. The original intent of the Olmsted Brothers design will only be fully realized with inclusion of this area as a terminus/focal point for the curving path system. Figure 3-11 illustrates the recommended improvements in this area.



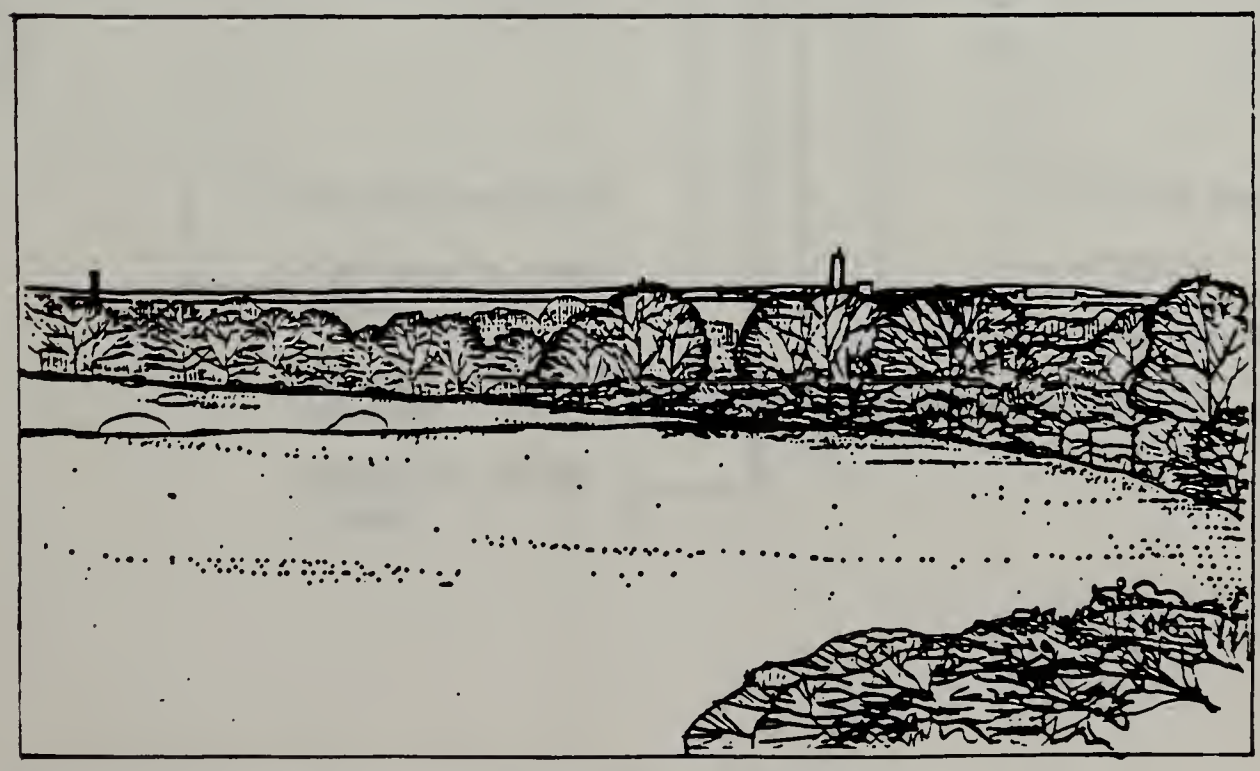
Historic Plan

In historic design, dense planting controlled views and defined spaces.



Existing Condition

Swimming pool and power plant intrude on view of lower park.



Master Plan

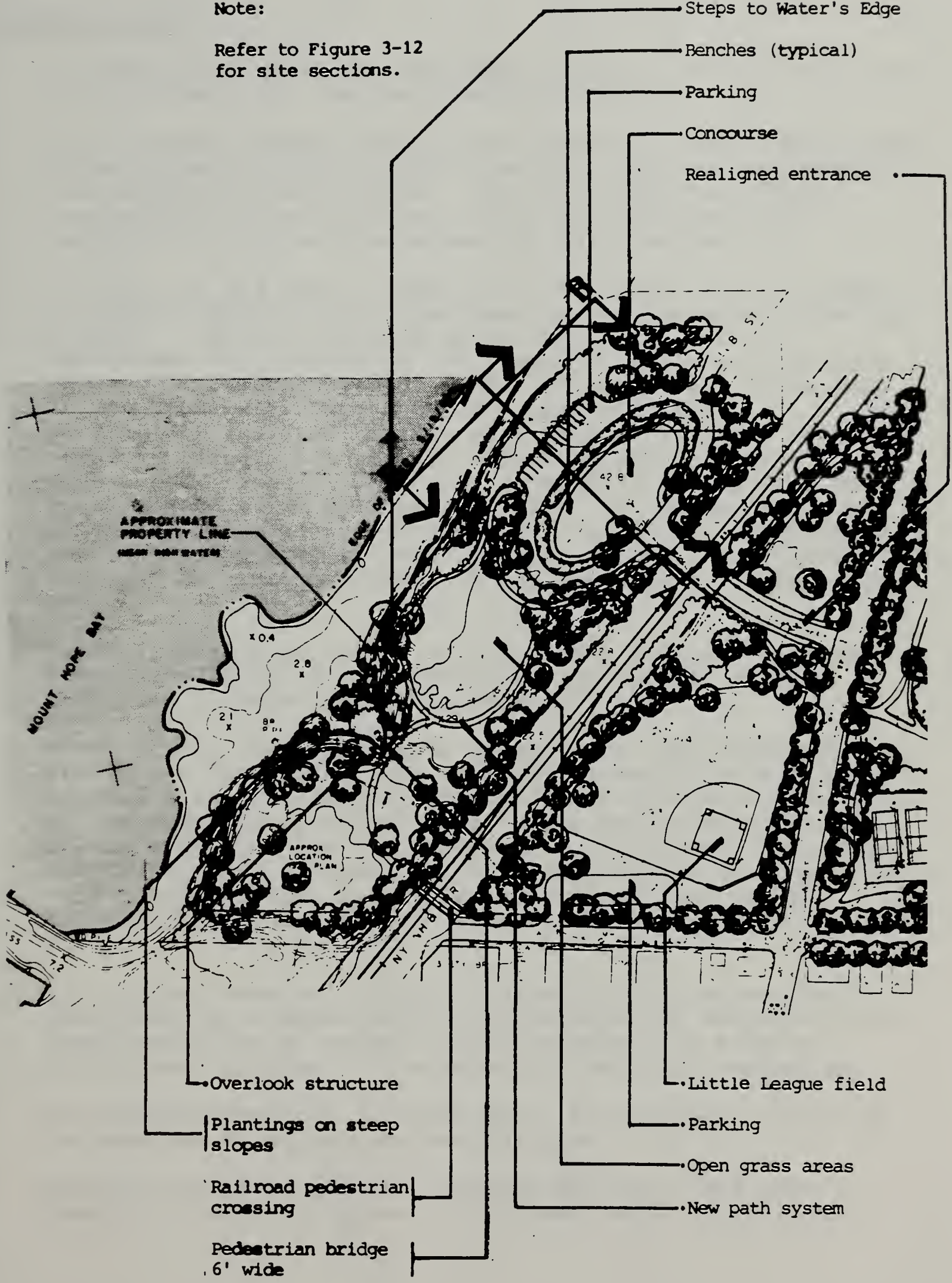
Intrusive elements are screened and pastoral scene is enriched with plantings.

View from Brow - Middle Section

Figure 3-10

Note:

Refer to Figure 3-12
for site sections.



Specific Site Improvements - Shore Section

Figure 3-11

RECOMMENDATIONS

1. The Park Road shall be realigned to form a "T" intersection at Bay Street for improved traffic safety.

2. The original flowing line of the carriage road, crossing Bay Street from the Park's Middle Section, will be preserved in the pedestrian path system. This will keep the visual continuity for the stroller, while safely separating vehicular and pedestrian access to this Section.

3. The Oval at the water's edge shall be contoured and graded to depress the parking area from view as one enters over the bridge. A pedestrian walkway on top of the Oval's embankment will reinforce the symmetry, while an open lawn space will predominate the center of the Oval. Since this is the primary vantage point for the waterview, strategically placed benches will provide pleasant resting areas for visitors entering on foot as well as those arriving by car. To this end, convenient access from the parking area below must be available. Planting should be informal, designed to reinforce the views while separating the top of the Oval (pedestrian space) from the vehicular entrance by dense plantings on the embankment. (Figure 3-12).

4. Careful grading to create an undulating and naturalistic topography should be reinforced by appropriate plant materials in shrub beds (Figure 3-13).

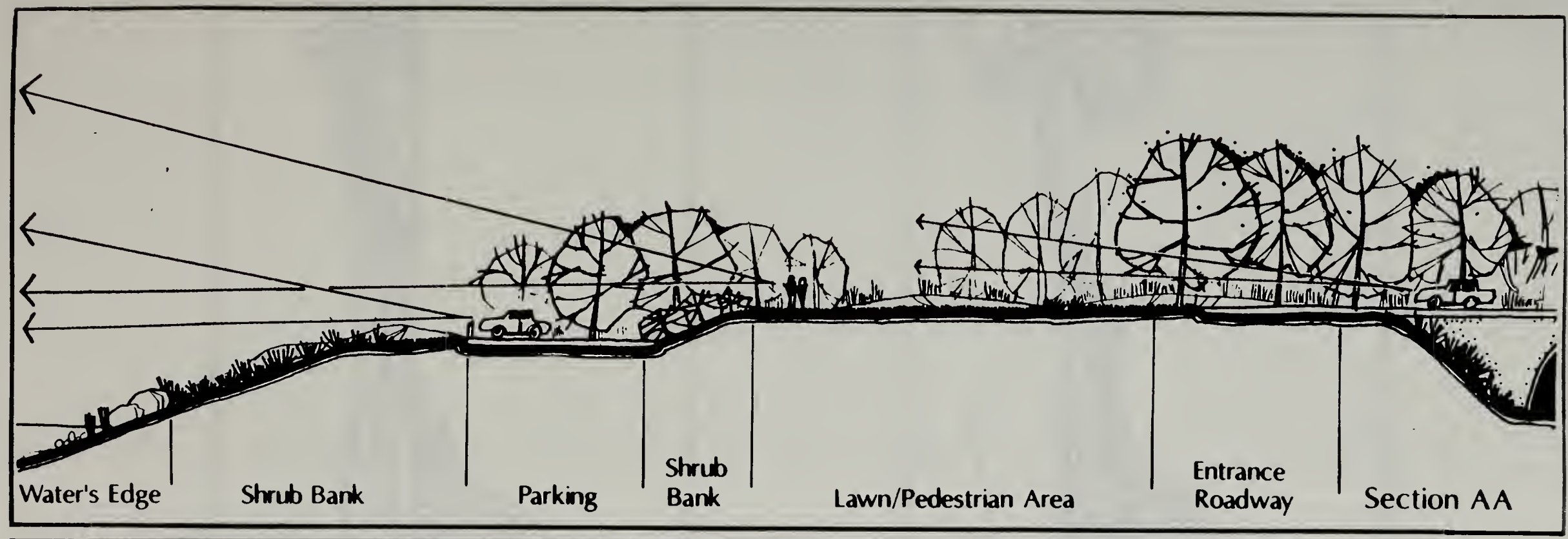
   Views of the water should be enhanced by edge plantings of vistas and thoughtful, yet informal, location of walkways, sitting areas, and signs. Special attention should be given to the planting of visual screens for the shipyard at the southern end and the new condominium development next door, and as physical screens for windbreaks around seating areas, with consideration, again, for emphasizing the views. Historically, these screens were recommended by the Olmsted firm.

   To provide focus to the path system in the southern end of this Section, a small Overlook Structure may be called for, constructed out of vandal-resistant materials such as fieldstone (similar to the existing Overlook foundation).

5. The establishment of a picnic grove with several tables is recommended in an appropriate location.

6. Walkways shall be a soft, informal material, and when possible limited to stone fines (less than 2% gradient).

Parking Oval and Concourse - Shore Section



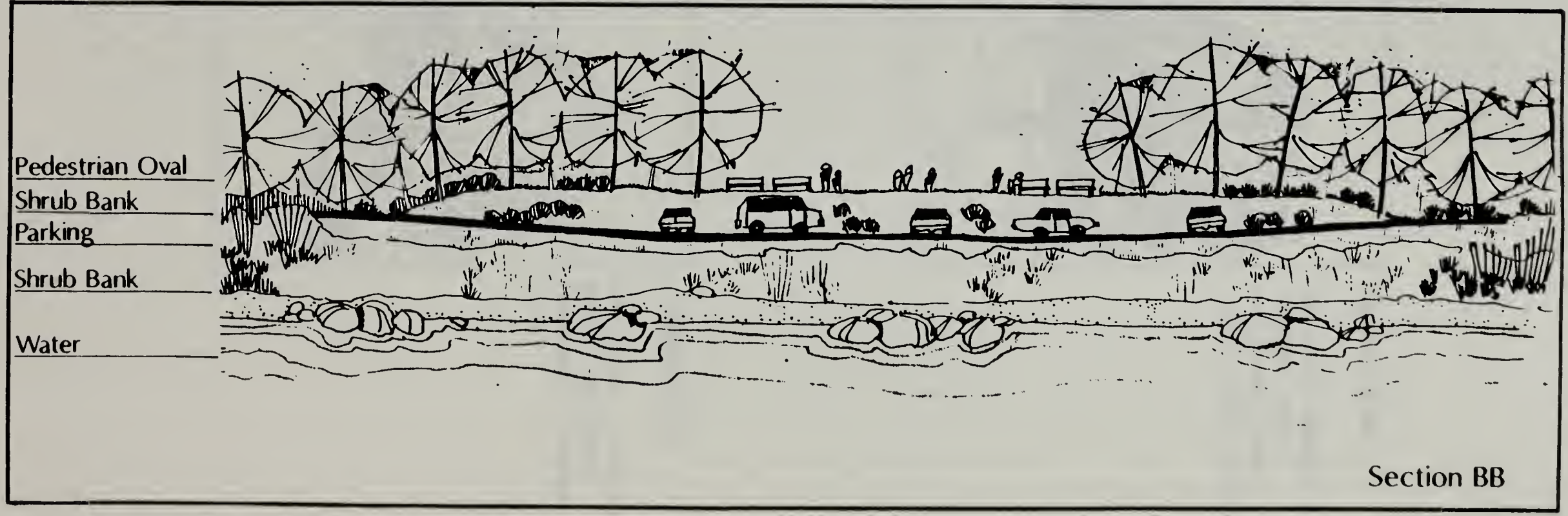
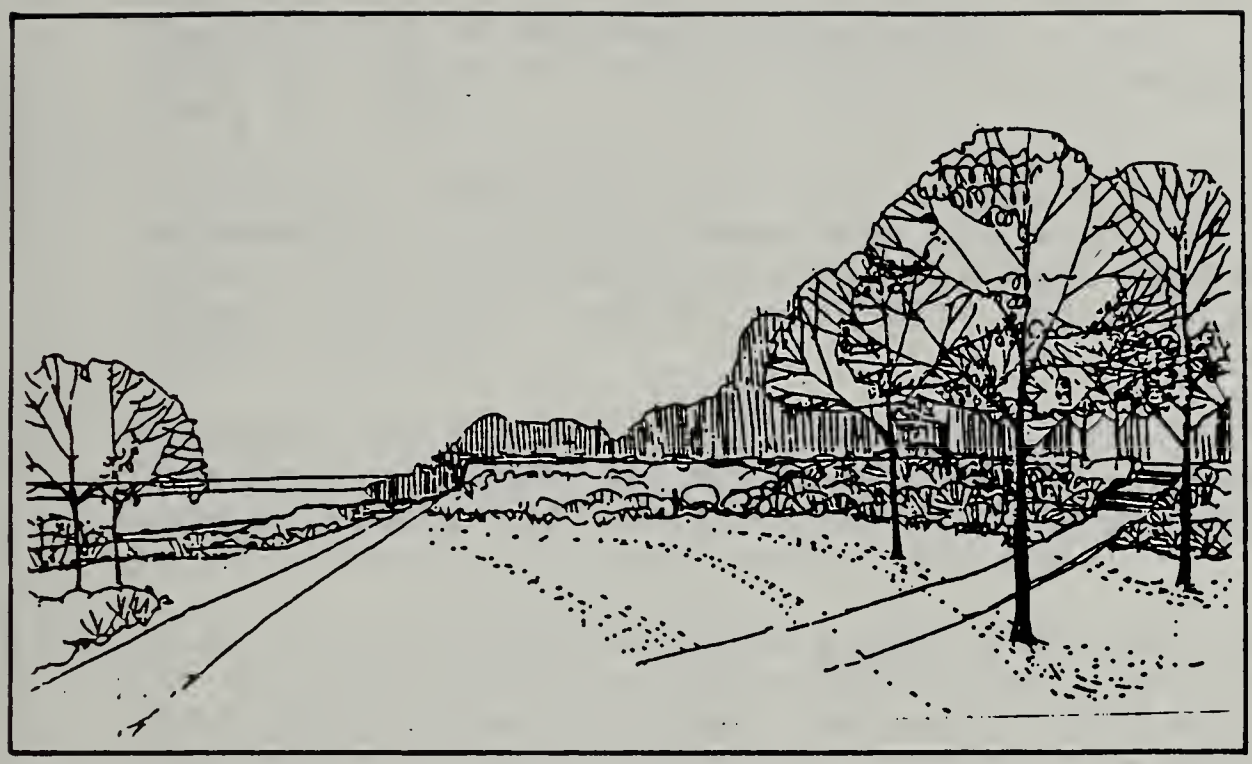
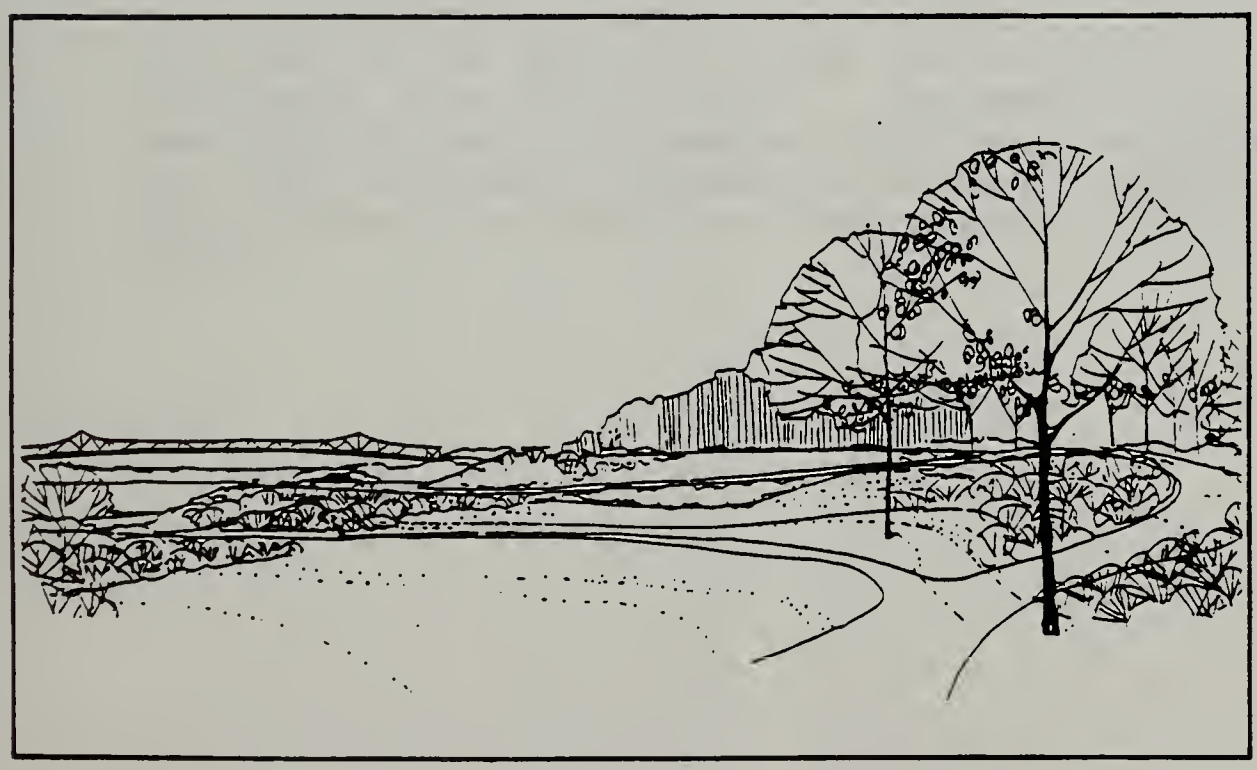


Figure 3-12



Historic Plan

Historic design concept with concourse overlooking the river.

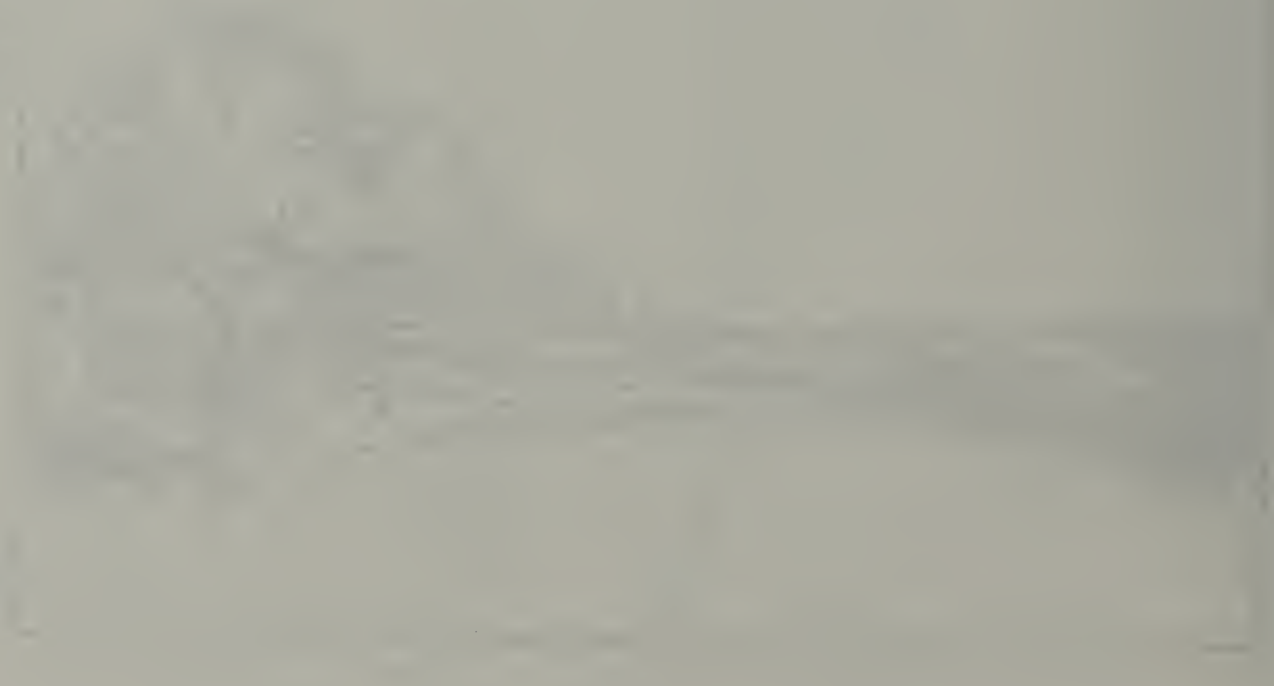


Master Plan

Concourse, parking, paths and field oriented to water view.

Pathways - Shore Section

Figure 3-13



7. Lighting in this area shall be limited to the Oval and Park Road using low-level, pedestrian-scale lights.

8. Separation of the recreational activities from the railroad right-of way is strongly recommended. Chain link fences shall be hidden by naturalistic and undulating plantings along its edge.

9. An at-grade pedestrian railroad crossing at Middle Street is recommended to provide more than one means of egress and to allow strolling through the Park without retracing one's steps. The cost estimation of this addition is $250,000 (1986 dollars).

10. Extension of the path system from the Oval to the new crossing completes the circumnavigational nature of the Park's intent, and gives access to an appropriate starting point for a future path down to the water.

11. While this Section is being graded initially, the sub base for an access path to the water's edge shall be prepared. The historic plan includes the rocky shore with swimming and boating activities presumably in mind. Presently the sewer system discharge along this shoreline, as well as the questionable water quality of the Bay in general, reduce the necessity of shore access. However, it is assumed that under the current climate of environmental concern these problems will be rectified eventually.

Detailed configuration and specific location of the path will be determined during site design. However, a general location of the path and steps to the water are suggested on the Master Plan (Figure 2-1). Implementation and installation may be somewhat difficult and expensive due to the need for state and federal coastal regulatory approval and the need for stairs and retaining walls due to the steep grades.

4.00 Budget Proposals and Priorities

4.00 BUDGET PROPOSALS AND PRIORITIES

The Master Plan recommends approximately $7 million of site improvements to Kennedy Park (1987 dollars). Several existing buildings, not including the Overlook Structure, are estimated to require an additional $600,000 of improvements. The Women's Comfort Station alone is estimated to require a minimum of $200,000 of improvements to restore this important structure.

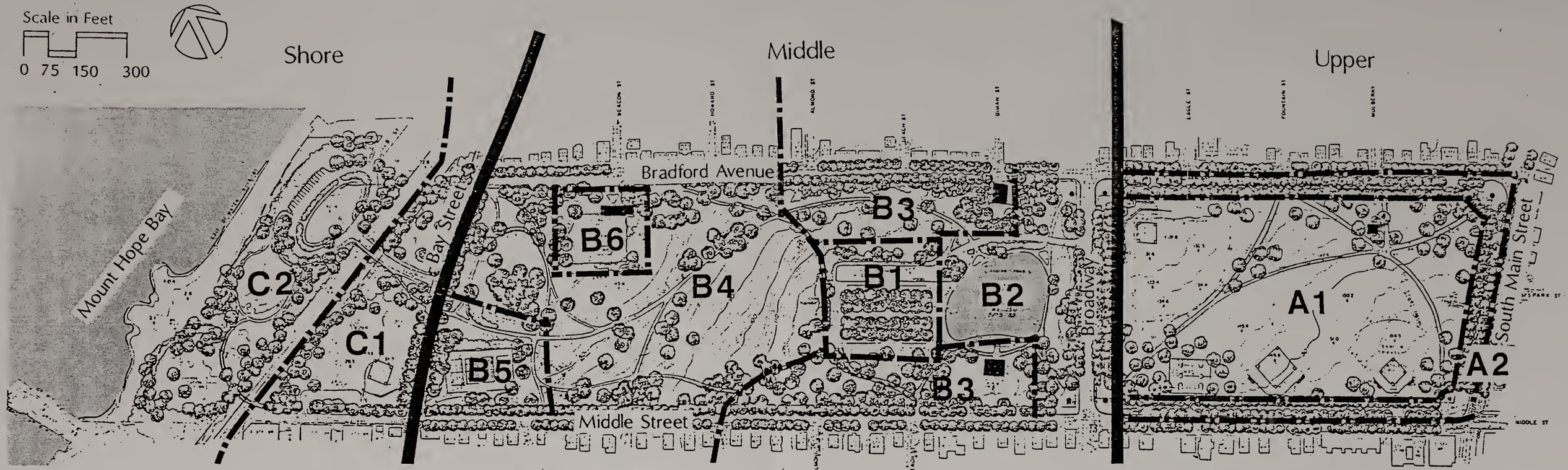
While $7 million averages $130,000 per each of the 54 acres of Kennedy Park, projected construction costs vary with existing site conditions and amenities proposed. For a more detailed review, summary statements follow for each project area. This information should be used to focus funding priorities to meet both short and long term project goals, with an overview of the complete objective always in mind. Funding package alternatives can be created to encourage public and corporate participation in this crucial element.

Figure 4-1 illustrates the three Project Areas (Upper, Middle and Shore) and subsections within each. Schedules of projected construction costs were developed for each area based upon extensive site examination and the Master Plan proposals. Construction costs for similar and recently completed projects were used to determine probable cost ranges for budgeting purposes. Detailed analysis when construction plans are prepared will provide more accurate costs. From this analysis, the Schedules of Projected Construction Costs were prepared for review with the Advisory Committee.

The Olmsted Historic Landscape Preservation Program allocates approximately $1 million of Phase One site improvements to Kennedy Park. Approximately $800,000 is earmarked for the Phase One improvements after the $140,000 Early Action Project and administrative costs are deducted. Phase Two will provide an additional $1 million ($800,000. construction).

4.01 PHASE ONE IMPROVEMENTS

The two most visible and intensively-used areas within the Park have been selected for the initial Phase One improvements.



C. SHORE SECTION

C1 - Bay Street to Tracks	$ 750,000.
C2 - Tracks to water	$ 850,000.
Section Total	$1,600,000.

Note: Cost does not include sewer outfall extention associated cleanup costs, or bank stablization. Approximately $50,000 - $100,000 of clearing, grubbing, and hydro-seeding by city agreement is not included in this estimate.

B. MIDDLE SECTION

Broadway to Overlook

B1 - Overlook and Grove	$ 450,000.
B2 - Pond/Entrance/Broadway	$ 800,000.
B3 - Play Area & Balance	$ 554,000.
Subtotal	$1,804,000.

Overlook to Bay Street

B4 - Entire area less B(5) and B(6)	$ 660,000.
B5 - Tennis Courts	$ 315,000.
B6 - Swimming	$ 100,000.
Subtotal	$1,075,000.
Section Total	$2,879,000.

A. UPPER SECTION

A1 - Area within sidewalk edge	$1,040,000.
A2 - Area including sidewalk to roads	$ 890,000.
Early Action Improvements Completed 1987	$ 140,000.
Section Total	$2,070,000.
TOTAL PROJECTED CONSTRUCTION COST	$6,549,000.
BUDGET	$7,000,000.

*NOTE: Cost of historic buildings renovation not included. Administrative and design/engineering fees not included.

Projected Construction Costs

Figure 4-1

MASTER PLAN FOR

Kennedy Park

OLMSTED HISTORIC LANDSCAPE PRESERVATION PROGRAM

Prepared by

Albert Veri & Associates, Inc.
Landscape Architects/Urban Designers
Providence, Rhode Island

City of Fall River
Carlton M. Viveiros, Mayor

The Commonwealth of Massachusetts
Michael S. Dukakis, Governor

Office of Environmental Affairs
Department of Environmental Management

Early Action Project **$140,000.**
(within Area A-1 shown in Figure 4-1)

The Upper Section of the Park was enhanced by planting 87 Acer platanoides "Emerald Queen" 5-5-1/2" cal. (Norway Maple) between the curb and the existing sidewalk on Bradford, South Main, and Middle Streets. Used curbing supplied by the City was installed to replace the "V" shaped concrete gutter and as a measure to protect the trees from vehicles. The grass area was stripped, regraded to make mowing easier, and sodded using a blended grass mix.

Phase One Project **$800,000.**
(Area B-2, shown in Figure 4-1)

The Middle Section of the Park was selected from Broadway to the Grove and Middle Street to Bradford Avenue. Areas of concentration include the reconstruction of the Pond, the relocation of the Park Drive Entrance at Broadway, and the four Entrance Plazas. Of the total budget for construction for this phase, the City has contributed $125,000 toward the reconstruction of the Entrance Plazas and will provide used granite cobbles as needed.

4.02 SUMMARY OF IMPROVEMENTS AND COSTS

To make the information more readable, summaries of the schedules of projected construction costs and associated improvements are presented for each project area and subsection illustrated in Figure 4-1. The estimated costs indicated have been prepared from schematic design drawings for general planning and budgeting purposes only. As such, these costs are subject to change during further design development and detailed evaluation of existing conditions.

A. UPPER SECTION SUMMARY Total: $2,070,000.

The Upper Section of the Park is bounded by South Main, Middle Street, Bradford Avenue and Broadway. The perimeter Park roads and intersections are included.

Early Action Project (see page 38) $ 140,000.

1. **AREA A-1: Area within but not including the perimeter concrete sidewalk.** $1,040,000.

   a) Site demolition of existing pavements and furnishings.

   b) Fine grading as required including minimum common borrow.

   c) Reconstruction of pavements as necessary.

   d) Reconstruction of Cupelo Field including terraced masonry walls to eliminate erosion.

   e) New fences and painting of existing fences and backstops (painted black).

   f) New catch basins and storm drains as needed. Clean and flush existing system.

   g) Replace and upgrade basketball (double) court.

   h) A new central water system with bib connections for Rain Kannon watering system.

   i) Clean and relocate some existing monuments. New flagpole.

   j) New benches, trash units and informational and interpretive signage.

   k) New buried electrical system and upgraded service to accommodate multi-events and festivals.

   l) New walkway lights and upgrading of floodlight system.

   m) Loam and sod disturbed areas, upgrade infields, and renovate existing grass areas with fertilizer, aeration, topdressing and liming.

   n) Selected large shade tree groupings, low shrubs and understory trees in selected areas.

2. **AREA A-2: Area including perimeter sidewalk to outside curb of adjoining park road. Associated intersections.** $890,000.

a) Site preparation and demolition of pavements and furnishings.

b) Earthwork and grading including common borrow and gravel as needed.

c) New perimeter walkway and special entrance and roadway crossing pavements.

d) Reconstruction of Park road pavements and installation of new curb alignment.

e) Set used granite curbing to match Early Action project. Provide handicap ramps where necessary.

f) Add catch basins and stormdrains as necessary.

g) New walkway lights and buried circuits; new electrical service.

h) Water bibs as necessary to extend watering system.

i) Bollard and rail fence at Broadway.

j) Granite dedication stone, flush to pavements.

k) Benches, trash units, regulatory and interpretive signage.

l) Large caliper shade trees to match Early Action Project.

m) Loam, sod, and shrubs.

B. MIDDLE SECTION SUMMARY **Total: $2,879,000.**

The Middle Section is clearly two separate areas, one to the east of the Overlook brow, and one to the west of it. Area B-2 has been selected for the Phase One improvements.

1. **AREA B-1: Central area including the Overlook structure, Concert Grove and parking area.** $450,000.

a) Site preparation and demolition of existing pavements, tree removal, curbing and furnishings.

b) Earthwork and grading as necessary.

c) Repair of granite steps.

d) Restoration, cleaning and pointing of Overlook Structure foundation.

e) New pavements, special pavements at entrances and Overlook area.

f) New catch basin and storm drainage system.

g) New water line and bib system for Rain Kannon sprinkler.

h) Specimen shade trees in Concert Grove.

i) Loam and sod disturbed areas; renovated existing lawn areas.

j) New walkway lights, buried system and service connection.

k) New signage for information, regulation and interpretation.

l) New benches, trash units.

2. **AREA B-2: Phase I Area including the Pond, both sides of Broadway and the entrances into the Park Middle Section. $800,000.**

a) Site preparation and demolition of existing pavements, and removal of furnishings.

b) Earthwork, grading and additional common borrow as needed.

c) New walkways and entrances.

d) Rebuild Pond including new bituminous bottom.

e) New catch basins as necessary, flush and clear existing.

f) Extend water system to pond.

g) New, realigned vehicular entrance and associated grading and filling.

3. **AREA B-3: Area including balance of Overlook area along Middle and Bradford Streets.** **$554,000.**

a) Site preparation, demolition as required and removals.

b) Tree pruning, fertilizing and removals.

c) Lawn renovation.

d) New walkways and restoration of selected historic walks.

e) Gardens and special areas around Women's Comfort Station.

f) Special pavements at selected areas.

g) New large caliper trees, shrubs and understory trees along streets.

h) Screen plantings at service building.

i) New walkway and special lighting for playlot.

j) Extend water system and bibs.

k) Restoration of Women's Comfort Station.

l) Curb ramps.

m) Signage: regulatory, informational and interpretive.

n) Benches, trash units and associated amenities.

4. **AREA B-4: Area including from Overlook west to Bay Street, not including improvements around tennis and swimming facilities.** **$660,000.**

a) Site preparation and required demolition.

b) Earthwork and grading.

c) Upgrade carriage road to become new pedestrian walkway.

d) Tree pruning and fertilization.

e) Lawn renovation.

f) Extend existing and install new walkways.

g) Large shade trees, shrubs and understory trees.

h) Selected walkway lighting.

i) Extend watering system and hose bibs.

j) Signage.

k) Benches and trash units.

5. **AREA B-5: Area including improvements to and relocation of tennis courts when facility is in need of upgrading.** **$315,000.**

a) Demolition of existing tennis courts and more closer to street.

b) Earthwork and grading, additional common borrow as required.

c) New paved courts, color coated.

d) Relocated and upgraded floodlights and fencing.

e) Benches.

f) Associated landscaping. Restore alignment of carriage drive as pedestrian walkway.

6. **AREA B-6: Area including improvements to and around swimming facility.** $100,000.

a) Demolition of portion of fence. Replace with black PVC or paint remaining fence black.

b) Color coat pavement to reduce glare.

c) Trees, shrubs and understory trees in selected groupings.

d) Add walkway and sitting area within tree grove.

e) Signage.

C. SHORE SECTION SUMMARY Total: $1,600,000.

The Shore Section is considered to extend from Bay Street to the water's edge. Bisected by the railroad right of way, the area nearest the water is the most underdeveloped and poorly maintained section of the Park.

AREA C-1: Area includes land between Bay Street and the railroad easement. An existing little league field is the only improvement in this area. $750,000.

a) Demolition and clearing as necessary.

b) Upgrade existing field.

c) New railroad crossing at grade with associated permits.

d) Large shade trees along the roadways.

e) New off-street parking area.

f) New walkway lights in selected areas.

g) Erosion control and screen plantings along right of way.

h) Watering system, bibs and meter pit.

i) Benches, drinking fountain, trash units and associated amenities.

j) Signage.

Area C-2: Area between railroad right of way and water's edge. Little or no alteration of the land or vegetative edge within 100 feet of water's edge to reduce need for erosion control and extensive walls. The figure given does not include costs for clean-up of the shore area subsequent to treatment of the sewer outfall. It is assumed that this will be included in the sewer project. $850,000.

a) Clearing and grubbing including disposal of debris.

b) Earthwork and grading with additional common borrow.

c) Drainage system.

d) New roadway Oval and parking area, paved and used curb.

e) Roadway lighting.

f) Loam and seed all distrubed areas.

g) New walkways and sitting areas.

h) Overlook Structure and bridge over ravine.

i) New benches, trash units and associated amenities.

j) Signage.

k) New shade trees, shrubs and understory trees.

5.00 Maintenance Management

5.00 MAINTENANCE MANAGEMENT

For Kennedy Park's Restoration to be ultimately successful and permanent, dedicated commitment to a strong and organized maintenance program must be made by the Fall River Parks Department (FRPD). This will require serious analysis of the present program and implementation of necessary changes without delay. Guidelines for this process are presented in this section.

5.01 REVIEW OF CURRENT RESOURCES AND ASSESSMENT OF FUTURE NEEDS

A. PERSONNEL

The Master Plan advises the Fall River Parks Department (FRPD) to revise and update their personnel organization in the following ways:

1. Existing job descriptions should be rewritten, underscoring the complex and intricate nature of systematic parks maintenance. Outmoded references describing public work functions and activities should be deleted and replaced with sound landscape maintenance methods and practices.

The introduction into the labor pool of new and specialized skills should be implied in job descriptions. Personnel should be hired who have significant experience in the following areas: horticulture, arboriculture, turf science and pesticide applications. There should be enough differentiation between job categories to encourage personnel to seek training, education, and practical experience leading to job advancement.

The sample job description (Figure 5-1) is used to identify the duties and responsibilities of a specific job and the minimum qualifications necessary to perform the tasks of that job.

JOB DESCRIPTION

TITLE: Horticultural Supervisor

GRADE/SUMMARY:

SUMMARY: This position is within the Department of Public Parks. Responsibilities include the propagation and cultivation of flowers and plants both outdoors and in the Greenhouses. Supervises the Landscape Gardeners.

Accountable to the Director of Greenhouses.

DUTIES & RESPONSIBILITIES:

1. Supervises and works with the Landscape Gardeners in their tasks in the Greenhouses or in the outdoor gardens and other planting areas.

2. Apply and supervise others in pesticides and fertilizer applications.

3. The Horticultural Supervisor oversees the pruning and care of all roses, bushes and small trees below a height of 15 feet.

4. Supervises garden layout and maintenance, propagation, grafting, repairing storm damage, etc.

5. Performs additional duties as assigned by the Director of Greenhouses.

MINIMUM QUALIFICATIONS:

1. A high school diploma or equivalency certificate is desirable.

2. Experience of at least three years in horticultural and floricultural work, including supervisory experience.

3. State Certification as a pesticide applicator must be obtained.

Sample Job Description Figure 5-1

2. Training programs should be developed to:

   a) Make employees aware of the special character (historic) and fragile nature (organic and finite resources) of Kennedy Park, and public parks in general.

   b) In the case of restored historic structures, train personnel with specialized skills for maintenance and repair of the historic/reproduced fixtures found in these buildings.

   c) Orient employees to an overall management strategy (improvement, redevelopment, preservation)

   d) Enhance employee awareness of the linkage between critical problems created through park use and abuse and the mitigation of these problems through the performance of an assigned task.

   e) Improve employee skills and productivity.

   The majority of the training can be accomplished through the use of various educational tools. A pamphlet can be developed to illustrate proper park care and the relationship between a task well done and the avoidance of a future problem.

3. The Department should also subscribe to magazines (e.g. Landscape Management, Arbor Age, Grounds Maintenance)(13,14,15) which publish both informative and innovative activies on maintenance techniques. These publications should be made available to park supervisors and to the work force. Supervisors should attend seminars on the landscape industry that may prove beneficial for personnel. The Massachusetts Tree Wardens, Massachusetts Turf Growers Association and the Massachusetts Nurserymen's Association regularly conduct short courses during the winter months to exchange information and view developments on the various trades. These programs are all within commuting distance of Fall River.

4. The Parks Department is severely understaffed. City officials have relied heavily on temporary assistance to bridge the gap that presently exists between manpower needs and maintenance responsibilities (identified in the "Site Analysis and Evaluation of Kennedy Park")(16). Over dependence on seasonal help is not good policy and should be discouraged; in many cases seasonal employees do not

possess developed skills, good work habits, or the motivation to be a positive contributing force to the overall effort.

Furthermore there is no guarantee that a worker who has gained valuable insights through on-the-job experience will return the following year. A considerable investment in wages and supervisory assistance is lost as this process repeats itself year after year. Also, seasonal workers have no expectation of earning a longer tenure in response to performance. As a result they seldom work effectively alone or in small groups and require close supervision.

5. Maintenance requirements will certainly increase as Kennedy Park experiences a complete rehabilitation over the next several years. To meet this challenge it will be important not only to augment the present staff with additional permanent employees, but also to consider seeking contractual assistance as an effective means of improving maintenance programs.

   Based on future maintenance projections it is recommended by the consultants that over the next two years three employees should be added to the regular personnel roster and permanently be assigned to Kennedy Park. Each should be proficient in turf care management and basic horticultural practices.

   At least one of these persons should possess supervisory capabilities obtained through a previous work history. Once hired this person should assume a dual role of introducing the existing staff to new landscape practices while also serving as an in-house clerk of the works for monitoring any future contractual service improvements. The proposed salary for this position should be within the competitive range of $17,000-$18,500. (1987).

   Therefore, the staff profile for the Kennedy Park Crew will consist of: one supervisor, three equipment operators, and two horticulturalists with knowledge of arboriculture and general landscape maintenance practices.

B. EQUIPMENT

The size and complexity of Fall River Parks System in general and of Kennedy Park in particular requires the acquisition of several pieces of equipment in addition to, the represent inventory. There is a shortage of transport vehicles and also a lack of elementary hardware needed to perform routine landscape maintenance operations (harrow, rototiller, sprayer).

A small dump truck (2-1/2-3 cubic yards) and a crew cab truck seating six, should be purchased by the department to improve transportation needs. The capacity of the crew cab is often valuable when mass pooling of labor is the only effective way to complete a task. Trailers to move equipment from park to park should also be considered in future purchases.

Overall maintenance strategy will obviously play an important part in the timing and selection of future landscaping equipment purchases. Therefore, the FRPD should initially purchase equipment useful in performing a wide variety of tasks (inherent flexibility), and will be a cornerstone for building a more specialized program (accessory capability). By adopting this "formative stages approach," the department will still retain the option to contract out a given function if evaluation shows this letter method to be more cost effective than additional equipment purchases.

Although the inventory lists a sufficient quantity of lawn cutting machinery, no single type of equipment should be expected to fulfill all mowing needs in a park system as varied as Fall River. Lawn cutting equipment must be tailored to the various landscape and topographical features found throughout the system. The FRPD is presently placing a heavy dependence on one type of mower (EXCEL HUSTLER) to perform the majority of its mowing maintenance. Although this machinery is relatively new and does represent the latest in state-of-the-art technology its best performance is geared toward flat, open land. Another type of mower with proven cutting ability on changing terrain and steep slopes should be introduced with the FRPD's mowing fleet, such as the Scaggs 72" rotary riding mower.

A summary of the equipment which should be purchased to meet these objectives is listed below:

EQUIPMENT NEEDS

Quantity	Description	Projected Cost
1	Dump Truck (2-1/2-3 c. yd.), GMC	$15,000.
1	Crew cab pickup, GMC	$13,000.
1	Utility tractor 45 hp	$12,000.
1	Aerifier Jacobsen 595	$ 3,000.
2	Scaggs 72" rotary riding mower @ $4,600. EA	$ 9,200.
1	Leaf Blower Model 40	$ 2,200.
1	Leaf sweeper	$ 6,500.
3	J88 Push Blower @ $400. EA.	$ 1,200.
1	Smithco 55-gallon utility sprayer	$ 850.
2	12' tag-along trailers at $3,500. EA	$ 7,000.
	TOTAL ESTIMATED COST	$69,950.

C. BUDGET

More than any other factor, inadequate funding currently limits the FRPD's ability to develop and implement a comprehensive maintenance management plan. The fact that the 1986 fiscal appropriation for the Department of Parks and Recreation ($570,000) is less than 1% of the total municipal budget clearly highlights low municipal priority.

Furthermore, within the Department of Parks and Recreation there is extreme competition among the separate divisions for funds. Combined with increasing demands for wages and benefits, this translates to an annual decrease in allocations for capital expenditures. (see Figure 5-2) In 1986, only 0.3% of the Parks Department allocation was budgeted for capital outlay; $2,500 is not sufficient even to support replacement of outdated or broken equipment, let alone fund improvements such as new trees, etc. (One suggestion for future consideration is to upgrade the Parks division of the Department of Parks and Recreation to departmental status, removing interdivisional funding competition.)

The high percentage for wages and benefits indicates that the current budget is labor intensive with very little emphasis on materials and supply-related activities (Fertilizing, fencing, lights, small tools, etc.)

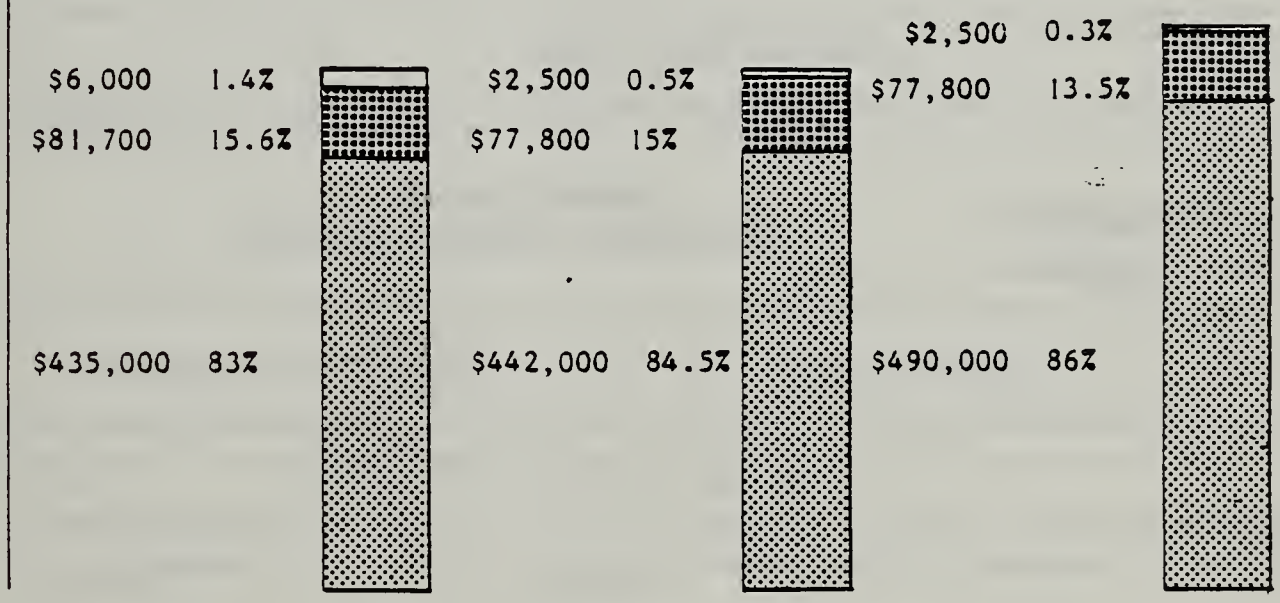
To define and control expenditures, the budget should be revamped to include separate line item accounts that link funding requests with specific maintenance activities.(Figure 5-1). This will dissuade misappropriation of generalized allotments and contribute to the necessary budgetary analysis and reorganization.

Capital funds must be increased to not only support new equipment needs but also to permit a judicious equipment replacement program. The FRPD should give serious thought to innovative finance methods, such as lease-purchase arrangements, to underwrite future capital improvement programs. Since the length of the lease period is significant in determining the annual payment amount this method can be used to acquire critical machinery without altering financial stability.

Finally, future budgets should list under Expenditure Resources a new entry entitled "Miscellaneous Services." Where applicable, this account shall be used by the FRPD to fund professional contractual assistance for such activities as lawn fertilization, vegetation control and tree pruning.

Annual Budgetary Allocations
Fall River Parks Department

	1984		1985		1986	
Total Budget	$523,000		$523,000		$570,800	
Capital	$6,000	1.4%	$2,500	0.5%	$2,500	0.3%
Materials	$81,700	15.6%	$77,800	15%	$77,800	13.5%
Wages and Benefits	$435,000	83%	$442,000	84.5%	$490,000	86%



Source: Fall River Parks Department, authorized budget allocations for fiscal years 1984, 1985 and 1986.

Annual Budget Allocations

Figure 5-2

FY 1987 BUDGET
PROGRAM EXPENSES EXPLANATION

RECREATIONAL FACILITIES
DEPARTMENT

PARK 124
PROGRAM

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	FY 1987 APPROPRIATION REQUEST	DETAILED EXPLANATION
1	2	3	4
01-621-5211-24	Electricity	30,885.00	Electricity for three(3) buildings at Kennedy Park, Two (2) buildings at Britland Park, two(2) buildings at North Park, and buildings at Maplewood, Lafayette, Ruggles, Abbott Court-Bicsntennial, and Healey Pool; Lighting of all baseball, softball and soccer fields and basketball and tennis courts.
01-621-5215-24	Gas Heat	5,650.00	Heat for all buildings stated above except for one at Britland and Travassos.
01-621-5241-24	Buildings & Grounds	900.00	Repairs to water bubblers, door locks etc.
01-621-5246-24	Vehicle Maintenance	4,700.00	Upkeep and repairs to three(3) automobiles and four(4) trucks.
01-621-5258-24	Other Repairs	5,800.00	Repairs to tractors, and lawnmowers to maintain parks & playgrounds.
01-621-5276-24	Office Equipment	100.00	For upkeep of office equipment.
01-621-5306-24	Advertising	100.00	Advertis for letters of field requests and equipment purchases.
01-621-5385-24	Other Purchased Services	13,000.00	For Comfort Stations.
01-621-5411-24	Gasoline	12,250.00	Gasoline for four(4) trucks, ten(10) tractors, sixteen(16) lawnmowers. thrse (3) automobiles, two(2) cruises and one (1) backhoe.
01-621-5439-24	Building & Maintenance	2,375.00	Electrical repairs on ballfield and building lights, plumbing repairs at various park buildings, spades, shavels and various hand tools ad repairs to windows due to vandalism.
01-621-5451-24	Cleaning & Custodial Supplies	150.00	Ajax, wiping rags, pine oil, toilet tissue, street brooms and mops.

FY 1987 BUDGET
PROGRAM EXPENSES EXPLANATION

RECREATIONAL FACILITIES
DEPARTMENT

PARK 124
PROGRAM

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	FY 1987 APPROPRIATION REQUEST	DETAILED EXPLANATION
1	2	3	4
01-621-5461-24	Tools	1,100.00	Shovels, rakes, hoes, etc.
01-621-5473-24	Groundskeeping Supplies	800.00	Purchase loam to fills holes in outfields and lime to line various fields.
01-621-5481-24	Tires,Oil,Batteries, Anti-Freeze	1,600.00	To purchase oil, regular and snow tires, batteries and anti-freeze for all vehicles.
01-621-5531-24	Concrete & Cement	100.00	For installation of benches & playground equipment.
01-621-5534-24	Lumber	300.00	To repair benches and build forms for the installation of equipment.
01-621-5586-24	Other supplies	830.00	Fence parts, nuts, bolts, nails and other hardware.
01-621-5710-24	In-State Travel	150.00	For annual conferences of the National Institute on Park & Grounds Maintenance.
01-621-5731-24	Membership	50.00	To pay membership dues to the National Institute on Park & Grounds Maintenance.
01-621-5732-24	Subscriptions	150.00	To purchase City Directory and other trade manuals.
	TOTALS	80,990.00	
01-621-5861-24	Other Equipment	15,300.00	

Sample Program Expenses Analysis

Table 5-1

FY 1987 BUDGET
PROGRAM EXPENSES ANALYSIS

RECREATIONAL FACILITIES
DEPARTMENT
PARKS # 24
PROGRAM

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	FY 1986 EXPENDITURES	FY 1988			FY 1987 APPROPRIATION REQUEST
			ACTUAL EXPENDITURES (FIRST 1/3)	ESTIMATED EXPENDITURES (LAST 2/3)	TOTAL ACTUAL AND ESTIMATED EXPENDITURES	
1	2	3	4a	4b	4c	5
01-621-5211-24	Electricity	38,225	13,107	17,778	30,885	30, 885
01-621-5215-24	Gas Heat	3,661	69	5,581	5,650	5,650
01-621-5241-24	Building & Grounds	5,990	-91	991	900	900
01-621-5246-24	Vehicle Maintenance	4,498	563	4,137	4,700	4,700
01-621-5258-24	Other Repairs	7,165	1,424	4,376	5,800	5,800
01-621-5276-24	Office Equipment	79	286	-	286	100
01-621-5306-24	Advertising	409	116	-	116	100
01-621-5385-24	Other Services	7,171	-	13,000	13,000	13,000
01-621-5411-24	Gasoline	9,571	3,411	8,839	12,250	12,250
01-621-5439-24	Building & Maintenance	1,782	-	2,375	2,375	2,375
01-621-5451-24	Cleaning Supplies	-	37	113	150	150
01-621-5461-24	Tools	33	-	1,100	1,100	1,100
01-621-5473-24	Groundskeeping & Supplies	466	27	773	800	800
01-621-5481-24	Tires,Oil, Batteries	1,052	325	1,275	1,600	1,600
01-621-5531-24	Concrete & Cement	-	-	100	100	100

FY 1987 BUDGET
PROGRAM EXPENSES ANALYSIS

RECREATIONAL FACILITIES
DEPARTMENT
PARKS #24
PROGRAM

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	FY 1986 EXPENDITURES	FY 1988			FY 1987 APPROPRIATION REQUEST
			ACTUAL EXPENDITURES (FIRST 1/3)	ESTIMATED EXPENDITURES (LAST 2/3)	TOTAL ACTUAL AND ESTIMATED EXPENDITURES	
1	2	3	4a	4b	4c	4c
01-621-5534-24	Lumber	244	-	300	300	300
01-621-5586-24	Other Supplies	694	-	830	830	830
01-621-5710-24	In State Travel	85	-	150	150	150
01-621-5731-24	Membership	-	-	50	50	50
01-621-5732-24	Subscriptions	134	-	150	150	150
		81,259	19,274	61,918	81 ,192	80,990
01-621-5861-24	Other Equipment	82,545	10,000	5,300		

Sample Program Expenses Analysis

Table 5-1 (cont.)

5.02 PRESENT ORGANIZATIONAL SYSTEMS REVIEWED, NEW APPROACHES EXPLORED

A. CREW FORMAT

Currently, Fall River Parks are maintained under a decentralized plan, inhibiting the establishment of a comprehensive and productive maintenance strategy. Absenteeism and/or equipment breakdowns too easily disrupt the work schedule; the existing resource pool (trucks, materials, etc.) is too limited to support like maintenance regimens at all facilities; unless decentralized work crews are bound by strong procedures they tend to drift away from management objectives and begin to assume their own priorities. To correct these shortcomings, it is recommended that the Fall River Parks Department institute a more centralized deployment scheme for general maintenance of its neighborhood parks. One way to promote this strategy is to consolidate existing smaller sized crews into larger ones.

The historic character and scope of future improvements at Kennedy Park, however, mandate that the centralized format be modified and this park be maintained by a separate work crew. The crew should be assigned permanently, and should assume total responsibility for the maintenance management at this site. So that they can focus their attention on Kennedy Park, management should divorce this unit from other departmental perogatives. Six (6) personnel should be assigned to this unit. As discussed under Personnel issues, this action will require the Fall River Parks Department to hire three additional employees. Management should orient this unit to a two fold strategy:

a) to preserve the integrity of a rehabilitated, Olmsted-designed park by using sound horticultural techniques, and

b) to adapt and disseminate these successful practices throughout the entire parks system.

B. IN HOUSE vs. CONTRACTUAL SERVICES

We recommend that the Fall River Parks Department aggressively pursue contractual assistance in an effort to supplement existing and future maintenance capabilities. There are three primary criteria to be evaluated when considering contractual services for a particular action:

a) if in-house personnel lack certain technical skills.

b) if the department presently lacks necessary specialized equipment.
c) when professional services are more cost effective.

In general, the Fall River Parks Department should seek outside assistance when maintenance needs go beyond the capabilities of departmental resources.

In this event, it is important to prepare tightly worded specification documents. Attention to detail during this process will avoid pitfalls later, since contractors are working for profit and have been known to take short cuts.

Specifically, the Fall River Parks Department should consider contract maintenance for the following types of services:

a) Chemical lawn care

b) Turf and soil aeration

c) Liming

d) Annual overseeding

e) Periodic tree preservation

C. ALTERNATIVE SUPPORT FOR EXISTING PROGRAM

It is highly unlikely that the burdens of barebone budgets, staff reductions and an inadequate maintenance program can be overcome relying solely on municipal means. Knowing this, the Fall River Parks Department is advised to go beyond conventional methods and explore other avenues of support for shaping maintenance programs and rebuilding parks. There are a number of mechanisms available to the Fall River Parks Department to accomplish these goals.

1. First and foremost the Fall River Parks Department should consider establishing a not-for-profit Kennedy Park Conservancy. The purposes of conservancy would be:

   a) to promote and assist in the restoration, maintenance and management of Kennedy Park.

   b) to develop funds and resources for the above, which would not otherwise be available.

   c) to organize a larger constituency for Fall River Parks and the Parks Department.

A good example of how such an organization can contribute toward park restorations efforts is found in the Central Park Conservancy, Inc. of New York City. This Conservancy is not only an organization that supplements the Park's budget in critical ways, but one that takes an active role in guarding against future deterioration. In 1985 this organization received over $4 million dollars in contributions.(17) New York City is not the only municipality that has started such a venture. Through the assistance of a funding grant provided by the National Park Service (NPS), a similar organization has been initiated in New Haven, Connecticut. The New Haven Parks Friends Organization was started as an advocacy group to increase public support for departmental objectives. Following their lead, the Providence Parks Department has recently submitted a grant application to the NPS to pay for start-up costs associated with the formation of Friends of Roger Williams Park Conservancy.

2. A second means of promoting support is to establish an Office of Volunteerism. The purpose of this office would be:

   a) to promote private assistance for special projects.

   b) to promote custodial assistance programs - ADOPT-A-PARK (e.g. Boy Scouts planting flower beds).

   c) to stimulate interest in park preservation.

   d) to promote conservation of park resources.

   A solid volunteer program offers training classes to instruct members in the various assistance roles. Self-sufficiency is the overall goal of this venture; volunteers are asked to undertake maintenance tasks as well as to perform teaching exhibitions.

3. To generate more direct involvement of the general public, and create awareness, pride, and support throughout the community, local educational institutions should be encouraged to develop both school-age and adult education programs in areas such as history and preservation, ecology and environmental conservation, etc. centered on the magnificent resource of the Park.

4. The FRPD in cooperation with the Mayor's Office should consider the establishment of a matching funds program. Such a program is designed to defray the overall cost of a particular project by promoting private tax deductible

contributions. Under this plan each dollar contribution is matched by the City, up to a specified limit. This type of funding mechanism can be used to buy trees, mulch plant beds or accomplish other highly visible maintenance tasks.

In association with this program, it may be advantageous to create a full-time staff position responsible for tracking and generating community support.

5.03 DEVELOPMENT OF A SYSTEMATIC MAINTENANCE MANAGEMENT PLAN

A. SYSTEMATIC MAINTENANCE MANAGEMENT DEFINED

Systematic maintenance management begins with the development of an orderly approach to departmental operations, divided into planning, organization, supervision and monitoring. Coordination of these components is essential if departmental objectives are to be achieved; administrators must realize that the random and isolated development of each element will only yield a disorderly and costly enterprise. The Fall River Parks Department is advised to develop a comprehensive strategy that unifies these four components, producing a logical, concise and cost-effective maintenance management plan.

The steps can be followed to develop the above for Kennedy Park:

PLANNING

1) Document features in the Park.

2) Document maintenance activities for each feature.

3) Define frequency of each activity according to desired maintenance standards.

ORGANIZATION

4) Determine resource requirements for each activity (identify manpower and equipment needs).

SUPERVISION

5) Develop procedure guidelines, and annual, monthly and weekly work schedules.

ANNUAL WORK PROGRAM AND BUDGET

	1.INVENTORY		2. ACTIVITY	3. WORK QUANTITY FOR EACH ACTIVITY			4. MAN HOURS AND CREW DAYS			ANNUAL COST DISTRIBUTION		
Col 1	Col 2	Col 3	Col 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11		
Ref. No.	Park Feature	Quantity	Maintenance Activity	Annual Frequency	Work Unit (Each cycle)	Annual Work Quantity (Quan X Annual Freq X Work Units)	Avg. Daily Production (from exp.)	Annual Man-Hours (Annual Quan. X Avg. Daily Prod.)	Annual Crew Days	Labor	Material	Total
0100	Tennis Cts	4								Calculate from Annual Man-Hours x hourly rate	Determined using the Annual Work Quantity, experience, current cost estimates, etc.	Labor + Materials
0110			reclining	1	each	4	2		2			
0120			Surface repair	2	50 s.f./court	400 s.f.	50 s.f.		8			
0130			surface sweep	30	each	120	4 / .5 day		15			
0140			nets-install/ remove	2	each	8	2		8			
0150			nets-repair	4	each	16	2		8			
0220	Basketball Courts	2										
0210			nets/hoops	4	each	8						
0220			lines	1	each	2	2		12			
0230			surface repair	2	50 s.f./ct	200 s.f.	100		4			
0240			surface sweep	30	each	60	2/.25 day		7.5			
0250			lighting rep.	3	each	6	3		4			
0300	Ballfields											
0310			maintenance	7	each	28	2		42			
0320			line-up	15	each	60	2		15			
0330			repairs	6	each	24	4		18			
0340			weed control	3	each	12	2		12			
0400	Pedestrian Walkways	15,000 l.f.										
0410			sweep	400%	33% (5,000 l.f.)	20000						
0420			repair	1	20% (3,000 l.f.)	3000						
0430			resurface	1	10% (1,500 l.f.)	1500						
0500	Roadways/ Parking Lots	200,000 s.f.										
0510			sweep									
0520			repair									
0530			resurface									
0540			snow removal									
0550			weed control									
1200	Turf	35 ac.										
1210			mowing	30	100%	1050	20		157.5			
1220			seeding and sodding	2	28% (10 ac.)	20	6		13.3			
1230			aeration	2	28%	20	10		4			
1240			fertilization	3	57% (20 ac.)	60	20		3			
1250			irrigation	10	60% (21 ac.)	210	20		21			
1260			liming	1	80% (28 ac.)	28	16		3.5			
1270			weed control	2	80%	56	25		4.5			

Note: The Figures on this chart are for discussion purposes only, and the categories do not attempt to be all-inclusive. Actual data must be collected on the site, and categories amended and created to be site-specific. Thus not all activities on this chart are completed.

Sample Annual Work Program and Budget

Table 5-2

MONITORING

6) Monitor work performance and periodically inspect main Park features.

A thorough compilation of this data will supply the Fall River Parks Department with the sufficient information to establish an effective system for management and monitoring of the maintenance responsibilities at Kennedy Park (Table 5-2).

B. PROGRAM OUTLINED

1. Document Features (Table 5-2, Columns 2 & 3)

The feature inventory is a detailed list of all maintainable objects and facilities in the Park. General categories which clearly identify the specific item(s) in a group should be listed: Fence (post and rail, chain link); Buildings (Women's Comfort Station, Overlook), etc. (Table 5-3).

The feature inventory should be as comprehensive as possible and should enumerate quantities of each where applicable. A short description should also accompany each item. (Quantities shown are for illustration only.)

SAMPLE FEATURE INVENTORY

FEATURE	QUANTITY	DESCRIPTION
1. FENCE	630 l.f.	a. 6' height, perimeter chainlink at Cupelo Field.
	48 l.f.	b. 4' height, enclosure chainlink at World War II Monument, Main Street.
2. TURF	36 ac.	a. Open grass areas - Upper Section
	22 ac.	b. Parkland areas with trees - Middle and Lower Sections.
	6 ac.	c. Ballfields.
3. BENCHES	16 ea.	a. Victorian, park-wide; purple heartwood slats.
	9 ea.	b. Concrete frame, concourse; yellow pine slats.
	14 ea.	c. Metal, ballfields.

Sample Feature Inventory Table 5-3

2. **Document Maintenance Activities for Each Feature** (Table 5-2, Column 4)

The specific work activities necessary for proper maintenance of a given feature are then itemized and prioritized. Each activity is described by a procedure, the purpose of the task, or the feature to be improved:

Turf: mowing, fertilizing and weed control, aeration, liming.

Buildings: graffitti removal, physical repairs, painting, trash clean-up.

Shrubs: pruning, fertilizing, mulching, replacement of dead material.

Emphasis is placed on identifying activities that represent major maintenance efforts, with minor tasks being placed under the most closely related activities (i.e. staking would fall under the category of tree/shrub planting).

3. **Define Annual Frequencies and Work Quantities for Each Activity** (Table 5-2, Columns 5, 6, & 7)

In determining the quantity of work associated with each activity on an annual basis (and eventually the total annual cost of each), the process is most easily broken down into several steps.

a) The standard of maintenance of the given feature is established through the frequency of associated work activities (Column 5), and is set by the Fall River Parks Department according to departmental objectives and availability of funds. Quality of maintenance can be improved or cost reduced by adjusting the number of times an activity is performed. (e.g. The maintenance level of turf is controlled by how often it is mowed, fertilized, overseeded, etc. as compared to an ideal standard.)

b) To assist in calculating the total amount of work performed for each activity, a unit of measurement must be established (Column 6). For example, if there are a total of 35 acres of turf, but only 10 acres are seeded/sodded (Reference Number 1220) each time that activity is undertaken, then the work unit is 28% of the total. (10 acres = .28 x 35 acres). By example again, when the tennis courts are swept (Reference Number 0130), each court is swept in entirety, so the

work unit would be 100%, or "each." Conversely, if it was determined through experience that surface repair (Reference Number 0120) generally consisted of 50 square feet per court when this activity took place, the work unit for surface repair would be 50 sf.

c) To then calculate the amount of work involved with each activity on an annual basis (Column 7), simple multiplication is used. The quantity of the feature (35 acres of turf) times the frequency with which the activity is performed (seeded 2 times annually) times the work unit accomplished each time (28% of total acreage) gives the annual work quantity for that activity (20 acres). Using another example; 4 tennis courts having surface repair twice each year at 50 sf each time yields 400 sf total repaired each year (4 x 2 x 50 sf = 400 sf) (Note: Of course, in these examples as with many other activity items, the areas covered with each cycle (i.e. 50 sf surface repair) are not necessarily the same as those of the previous cycle.)

This final figure will not only assist in identifying the quantity and cost of materials required on an annual basis (Column 11b) but will also determine the number of man-hours necessary to maintain a given feature at the defined standard, as shown below.

4. Determine Resource Requirements

When the annual quantity of work for each activity is known, the total man-hours required in a year for this activity (Column 9) can easily be calculated by dividing that total quantity by the average daily production for each man (Column 8, determined from experience), such as: 1050 acres mowed/yr - 10 acres mowed/day/man = 105 days/year x 8 hrs/day = 840 man-hours/year (assuming an 8-hour work day).

In the annual cost distribution for a given maintenance activity (Column 11) this annual man-hours figure contributes to the calculation of the labor cost(Column 11a).

To assist in the overall planning of the work schedule it is helpful to calculate the total number of crew-days required annually for the given activity (Column 10): Annual man-hours - hours/day = annual man-days (or man-days/yr) - number of men/crew (designated by supervisory personnel) = crew days/year. (840 man-hours/year - 8 hours/day = 105 man-days/year - 3 men/crew = 35 crew-days/year.) Finally, the annual crew-days provide a basis on which to determine

the number of days theoretically necessary for a crew to complete one cycle of the given activity: crew days/year -- frequency (or cycles/year) = crew days/cycle. (35 crew-days/year - 30 cycles/year = 1-1/6 days/cycle or 9-1/2 hours for a crew of three to complete one mowing cycle.) This can be used as a check for actual days used as indicated by field experience.

The use and yearly update of this type of itemized chart, although at first appearing somewhat cumbersome, is crucial to the organization, cost control, and effectiveness of Park maintenance.

5. Develop Procedure Guidelines and Work Schedules

To encourage consistency of maintenance practices and the documentation of field data, a comprehensive reference manual should be produced for use by the maintenance program supervisor. Included will be individual procedure guidelines for each maintenance activity, which clearly describe the activities and outline the correct routine for their performance (Figure 5-3). The frequency of the activity is noted, along with the personnel, equipment, and material required. The average daily production figure is provided as a guideline, along with the supervisor's estimated time frame for completing the activity. These guidelines should be updated annually as actual field experience dictates.

Through experience, past records, and consultation with other maintenance management specialists, manpower and equipment needs can thus be quantified.

Also included in the reference manual are annual, monthly and weekly work schedules. Annual maintenance calendars are used to program and schedule in-house personnel, temporary hiring and resources needed for seasonal operations, and to ensure work is not duplicated. Monthly calendars are used to control and schedule specific maintenance activities. Weekly maintenance calendars are established from the monthly calendar and on-site inspections which reveal additional work. Examples of these work calendars and schedules are shown in Table 5-4 and Figures 5-4 and 5-5.

6. Monitor Work Performance and Periodically Inspect Park Features

Along with procedural instructions, the crew foremen should be provided with a Daily Field Work Report, which indicates

PROCEDURE GUIDELINES
Maintenance Management System
Department of Parks and Recreation
Fall River, MA

ACTIVITY : AERATION CODE 1230

DESCRIPTION: Aerate grassy areas, ballfields and intensive use areas to relieve soil compaction. Aerate sloped areas, hillsides to increase water percolation capabilites.

FREQUENCY:

	J	F	M	A	M	J	J	A	S	O	N	D
Ballfields				X				X	X			
Intensive Use Areas					X				X			
Slopes				X								

CREW SIZE: Equipment Operator - 1

Total Personnel - 1

EQUIPMENT: Tractor- 3 pt. Hitch - 1
Core-rator Assembly - 1
Spiker to clean cores - 1

MATERIALS:

PROCEDURE:
1. Set out safety cones in large grass areas to mark start and finish points
2. Aerate opposite direction of mowing pattern
3. Check coring tines periodically to unclog debris from tubes.

Note: Stay clear of inground posts, pipes, etc.

AVERAGE DAILY PRODUCTION: 5.0 acres

PROJECTED TIME FRAME:
Start date: / /
Finish date: / /

Sample Procedure Guidelines Figure 5-3

KENNEDY PARK, FALL RIVER, MA.

ANNUAL WORK CALENDAR

			J	F	M	A	M	J	J	A	S	O	N	D
0100	Tennis Cts.													
0110		relining			x									
0120		surface repair			x	x								
0130		surface sweep				x	x	x	x	x	x	x		
0140		nets- install/ remove				x							x	
0150		nets-repair					x		x		x		x	
0200	Basketball													
0210		nets/hoops					x		x	x	x			
0220		lines			x									
0230		surface repair				x						x		
0240		surface sweep				x	x	x	x	x	x			
0250		lighting rep.					x			x		x		
0300	Ballfields													
0310		maintenance				x	x	x	x	x	x	x		
0320		line-up				x		x		x	x			
0330		repairs			x	x	x			x	x	x		
0340		weed control				x	x				x			
0400	Pedestrian Walkways													
0410		sweep				x		x		x				
0420		repair			x									
0430		resurface										x		
0500	Roadway/ Parking lots													
0510		sweep												
0520		repair												
0530		resurface												
0540		snow removal												
0550		weed control												
0600	Play Apparatus													
0610		repair												
0620		painting												
0700	Buildings													
0710		heat on/off												
0720		structural rep.												
0730		restrooms- rep.												
0740		weed control												
0800	Fences													
0810		repair												
0820		replace												
0830		weed control												

Note: Categories and frequencies are suggested for discussion purposes only, and shall be determined by the Parks Maintenance Director and actual experience.

Sample Annual Work Calendar

Table 5-4

			J	F	M	A	M	J	J	A	S	O	N	D
0900	Benches													
0910		repair												
1000	Lights													
1010		maintenance												
1020		paint poles												
1030		replace bulbs												
1100	Signage													
1110		Maintenance												
1200	Turf													
1210		mowing												
1220		seeding & sodding												
1230		aeration												
1240		fertilization												
1250		irrigation												
1260		liming												
1270		weed control												
1300	Trees													
1310		planting												
1320		pruning												
1330		fertilization												
1400	Shrub Beds													
1410		mulch												
1420		weed control												
1430		replace dead material												

Note: Categories given are only suggestions and are not intended to be a complete description of the Maintenance Activities necessary at Kennedy Park.

Sample Annual Work Calendar Table 5-4 (cont.)

KENNEDY PARK, FALL RIVER

MONTHLY MAINTENANCE WORK PLAN

1. TENNIS COURTS
   (1) Sweep, repair and line courts:

   (2) Finish lines - court nos:

2. BASKETBALL COURTS
   (1) Sweep, repair, line court nos.:

   (2) Replace hoop(s) - court nos:

3. WALKS
   Repair walks in the following locations:

4. PLAY APPARATUS
   Repair swings, s-hooks, chain in following:

5. ROADS/LOTS
   (1) Clean litter in following:

   (2) Repair holes in following:

6. BUILDINGS
   (1) Finish roof repairs at:

   (2) Turn off heating at following:

7. PARK CLEANUP
   (1) Finish cleanup at following locations:

8. TREE PLANTING
   Replace Dead tree(s) at Kennedy Park, Main St. #4

9. CHEMICAL WEED CONTROL
   Replace weed preventive chemical in infields at following ball fields:

10. BALLFIELDS
    Check for winter damage and repair and prepare infields, outfields at following:

11. TURF AREAS
    (1) Repair and seed dug-up areas at following locations by April 10, 1987:

    (2) Aerate outfields by April 10 at the following ballfields:

    (3) Fertilize lawns between April 1 and 10.
    (4) Start mowing lawns by April 20.
    (5) Place sod in outfields at ballfields:

Sample Monthly Maintenance Work Plan Figure 5-4

KENNEDY PARK, FALL RIVER

WEEKLY WORK SCHEDULE

MARCH 10 - 16, 1987

MONDAY
- Crew #1 - Repair and paint play apparatus near overlook.
- Crew #2 - Turn off heat in restroom; repair shingles at Women's Comfort Station
- Crew #3 - Pickup litter in barrels, road finish leaf collection at lower park.

TUESDAY
- Crew #1 - Repair fence (outfield) at Little League; gate at Middle Street entrance.
- Crew #2 - Prune low branches from trees (#20) on Main Street Side; fertilize.
- Crew #3 - Mulch shrubbery bed at concourse; harrow, grade and roll infield at Cupelo.

WEDNESDAY
- Crew #1 - Repair benches slats at Kennedy; check backbosrd, hoops at Basketball Court.
- Crew #2 - Prune low branches from trees on Middle Street; fertilize.
- Crew #2 - Harrow, grade and role infields at Little League, CYO fields.

THURSDAY
- Crew #1 - Litter collection barrels; potholoe repairs in roads.
- Crew #2 - Leaf removal near fenceline municipal pool; tennis courts.
- Crew #3 - Paint foul poles all fields.

FRIDAY
- Crew #1 - Install mulch in tree wells at concourse; install sand under play swings at tot lot.
- Crew #2 - Wood shop make home plates; paint maintenance garage floor.
- Crew #3 - Repair backstops at Little League and Cupelo field.

SATURDAY NO OVERTIME

Sample Weekly Work Schedule Figure 5-5

(1) the crew members selected for the assignment, (2) the activities assigned, (3) the location of each activity, and (4) a space to record of the actual work performed and time spent on each task. Two samples of Daily Field Work Reports are shown in Figure 5-6.

Accompanying the Procedure Guidelines in the supervisor's reference manual should be appropriate inspection check lists for each major feature and instructions for the inspection.

Inspection reports are a vital part of the maintenance management plan for several reasons:

(a) to trace the condition of each feature and note flaws if they exist.

(b) to determine resource needs required to improve a noted deficiency.

(c) to periodically evaluate the effectiveness of the relationship between the maintenance activity, its frequency, and subsequent success in the accomplishment of maintenance standards.

To achieve maximum results, the detail of the inspection report document should match the complexity of the feature. The Fall River Parks Department is advised to employ inspection reporting forms for the following at Kennedy Park:

(a) Trees, shrubs and turf

(b) Ballfields

(c) Hardware and Courts

(d) Pavements

(e) Women's Comfort Station

(f) Men's Comfort Station

(g) Overlook Pavillion

(h) Shore Overlook

Included is a sample Maintenance Inspection Guideline for Basketball Courts (Figure 5-7).

Daily Field Work Report

DEPARTMENT OF PUBLIC PARKS

DIVISION OF GROUNDS MAINTENANCE SERVICES

UNIT_____ TRUCK #_____

SUPERVISOR_____ DATE_____

CREW MEMBERS	LOCATION	WORK ASSIGNMENT

FROM GARAGE

TIME OF DEPARTURE A.M.

ODOMETER READING A.M. P.M.

FILL IN BELOW
ESTIMATED TIME OF ARRIVAL (E.T.A.)
ESTIMATED TIME OF DEPARTURE (E.T.D.)
ESTIMATED TIME APPLIES TO, LOCATION, COFFEE BREAKS AND LUNCH

TIME	E.T.A. E.T.D.	LOCATION & DESTINATION	WORK PERFORMED	INSPECTED BY	E.T.A.	TIME
7	15 30 45				15 30 45	7
8	15 30 45				15 30 45	8
9	15 30 45				15 30 45	9
10	15 30 45				15 30 45	10
11	15 30 45				15 30 45	11
12	15 30 45				15 30 45	12
1	15 30 45				15 30 45	1
2	15 30 45				15 30 45	2
3	15 30 45				15 30 45	3
4	15 30 45				15 30 45	4
5	15 30				15 45	5

Sample Daily Field Work Report (A) Figure 5-6

Daily Field Work Report

DEPARTMENT OF PUBLIC PARKS

DIVISION OF GROUNDS MAINTENANCE SERVICES

FIELD WORK REPORT

CREW DESIGNATION_____ DATE_____ ZONE_____

A. EMPLOYEE NAME	B. VEHICLE/EQUIPMENT USED

SITES VISITED	WORK FUNCTIONS PERFORMED
1.	
2.	
3.	
4.	
5.	
6.	

BELOW LIST TIMES TAKEN FOR COFFEE AND LUNCH BREAKS

A.M.BREAK FROM TO . LUNCH FROM TO . P.M. COFFEE FROM TO

SUBMITTED BY: DATE

REMARKS:

Sample Daily Field Work Report (B) Figure 5-6 (cont.)

MAINTENANCE GUIDELINES

FOR

BASKETBALL COURTS

The following is a general maintenance checklist for care of basketball courts throughout the city. These instructions apply to all courts, although some items may only be applicable to individual parks.

I. CARE OF PARK EQUIPMENT

A. General Equipment

1. Benches - Inspect for damage to slats and support structure. Determine if new coat of paint to cover surfaces is required. Also, observe to determine if footings are safely below grade or if they are exposed and in need of repair.

2. Trash Receptacles - Inspect for damage, vandalism and/or rot. Also, if stationary, determine if chain and lock is working properly, missing etc.

B. BASKETBALL EQUIPMENT

1. Clean court of glass, debris

2. a. Inspect court for large cracks ½" and over

b. Inspect court for repair of line marking where applicable

3. a. Check hoop and nets for secure connections, wear and vandalism

b. Inspect backboard supports for straightness and backboard to support fastenings for secure connection.

C. FENCES

1. Thoroughly inspect for:

a. Holes, broken wires, looseness, bulging or sagging.

b. Loose posts, missing post caps

c. All rails and fittings in place

d. Stretcher bars, bands, cables and clamps in place and tighten.

e. Tie wires in place and tighten

f. Sharp or protruding wires, bolts,

2. Gates shall not sag, hinges and latches shall be in good working condition

D. LIGHTS - Inspect lights for lamps, proper illumination. Check positioning of lamps on court.

Sample Maintenance Guidelines Figure 5-7

BASKETBALL COURT

CHECK LIST

ZONE_____

COURT_____

DATE INSPECTED_____

BY_____

I. THE BASKET

HOOPS _____

NETS _____

BACKBOARD _____

SUPPORT POSTS _____

II. SURFACE

MACADAM, CRACKS _____

LINE MARKING _____

III LIGHTS

BULB REPLACEMENT _____

SUPPORT POSTS _____

POSITIONING _____

IV OTHER

BENCHES _____

TRASH RECEPTACLES _____

V LITTER CLEANUP _____

VI. FENCING _____

_____

COMMENTS_____

_____

Sample Maintenance Guidelines Figure 5-7 (cont.)

Appendix A

APPENDIX A MAINTENANCE MODELS FOR HORTICULTURAL CARE PROGRAM

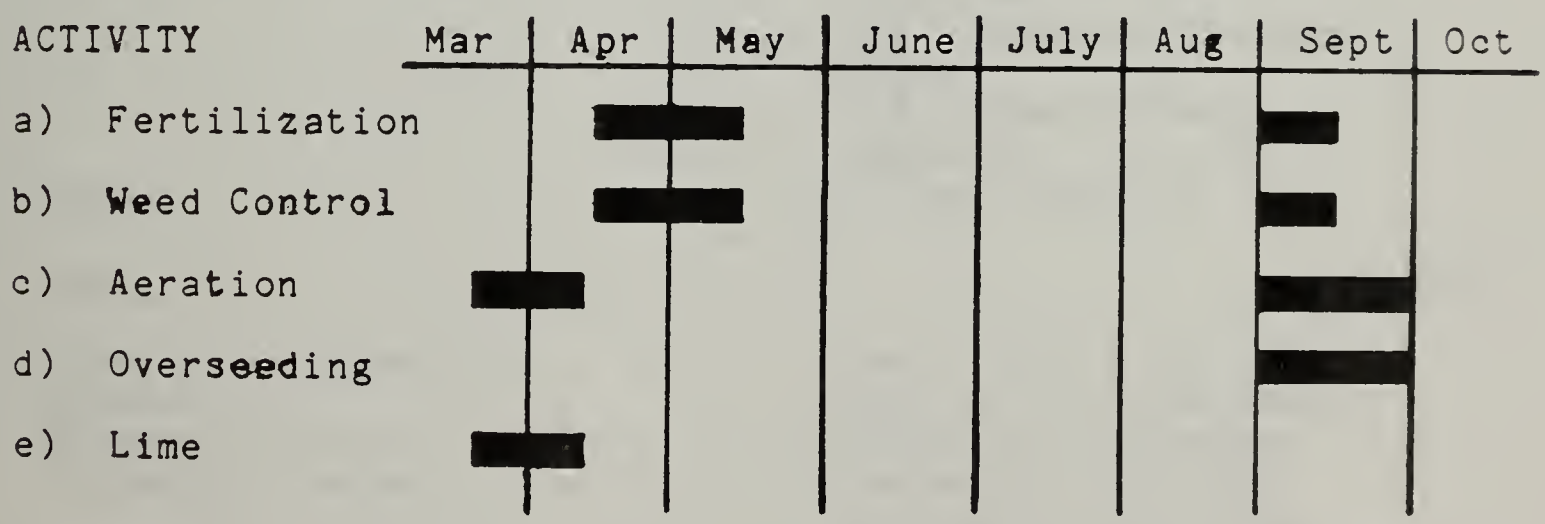
Neglect, abuse, and poor maintenance practices have all played a significant role on the decline of Kennedy Park over the past several decades. In no aspect is this deterioration more apparent than the landscape. Mass plantings of trees and shrubs have all but disappeared while those that remain display numerous deficiencies. Surface compaction and infertility have impaired turf quality. Where turf cover no longer exists, unstable soils and erodable surfaces have become a serious concern.

Reconstructing the landscape will eliminate these problems; however, the improvements will be short-lived unless sound maintenance and horticultural practices are emphasized in future planning.

In this text several model programs are presented to demonstrate the type of commitment necessary to initiate good turf, shrub and tree care. Each model provides information on appropriate activities, their timing, and the program cost. The Fall River Parks Department is advised to use these models as aides in formulating future maintenance management objectives.

A. TURF CARE PROGRAM

1. Activity Schedule



2. **Technical Guidelines for Activity Schedule**

a & b) Fertilization and Broadleaf Weed Control:
$84./ACRE/APPLICATION

Time of applications:	April 20 - May 15 September 1 - September 15
Method:	Liquid Application
Chemical Source Fertilizer:	Organic Urea or Equal
Chemical Source Herbicide:	Trimec Formulation
Elemental Ration N-P-K:	22-0-7
Minimum Rate Fertilizer:	1 lb. Actual n/1000 s.f.
Minimum Rate Herbicide:	per mfg.'s recommendations

c) Aeration: $170/ACRE

Time of Applications:	March 20 - April 15 September 1 - October 1
Method:	Tractor Drawn Core Aerator Jacobsen 548-100 or equal
Treatment Type:	Core Aeration

d) Overseeding: $280/ACRE

Time of Application:	September 1 - October 1
Method:	Tractor drawn overseeder Jacobsen or equal
Seed Mixture:	40% RAM 1 Kentucky Bluegrass 40% Jamestown Chewings Fescue 20% Palmer Perennial Ryegrass
Rate:	3 lbs./1000 S.F.

e) Lime: $78/ACRE

Time of Application:	March 20 - April 15
Method:	dry, ground limestone
Chemical Source:	Dolomitic Limestone
Elemental Ration:	Contains up to 50% magnesium carbonate
Rate:	25 Lbs. ground limestone/ 1000 sf

Prices are quoted from professional lawn service corporations and reflect 1986 cost for all labor and materials required to perform treatment.

3. **Cultural Requirements**

Irrigate in mid-summer at 1" per week, or as needed to compensate for lack of rain.

Mow when grass height exceeds 1-1/2" in spring and fall, and 2" in summer.

B. TREE CARE

1. Pruning

Uniformity and good branch development will be an important characteristic of new trees added to the Kennedy Park landscape. This high quality is a result of careful training of the saplings in the commercial nursery. Unfortunately, in the absence of diligent nursery practices the majority of young saplings often exhibit development poor structural growth. To ensure that the trees will grow into healthy, mature specimens in the Park environment, introducing and maintaining arboricultural standards is crucial.

Common structural deficiencies and their locations are indicated in Figure A-1.

Pruning should be performed on an annual basis to correct poor growth habits as well as to repair storm damage or other mechanical injury. Deciduous trees should be pruned in late fall, and for evergreens during the period of new growth (late May). The following is a general list of priorities for pruning young trees:

a) remove diseased, insect-ridden and dying branches.

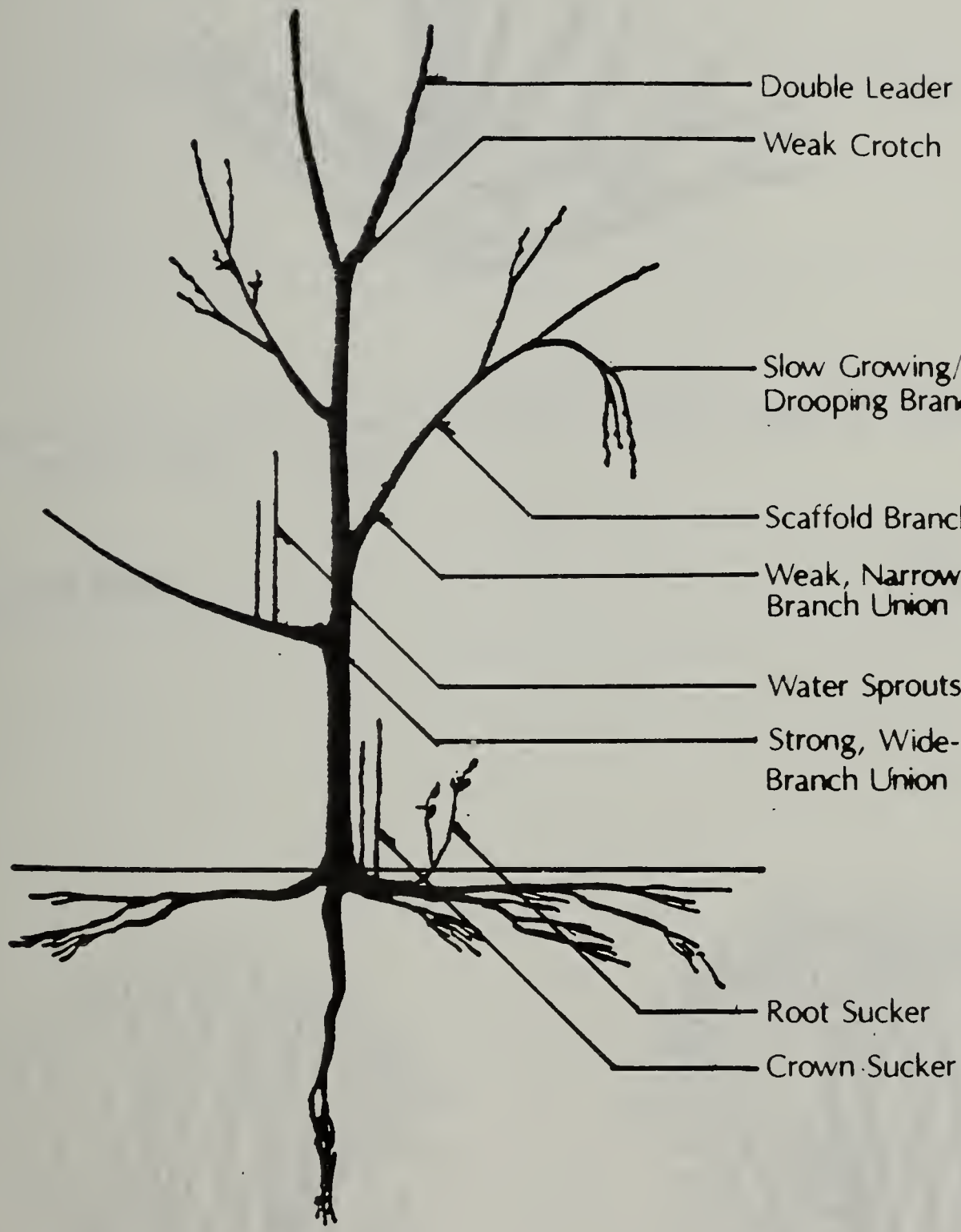
b) remove crossing or rubbing branches.

c) eliminate weak growth (drooping branches, suckers, watersprouts).

d) develop strong central leader by removing or cutting back competing limbs.

e) whenever possible remove scaffold branches, those attached to main trunk by narrow-angled branch union.

f) in Pines, improve density by pinching back one-half of new growth on "candles" (Figure A-2).



Weak Growth Habits in Trees

Figure A-1

If pruning is needed to promote density in pines, prune in late spring when the "candles" snap off easily.

Pruning Pines

Figure A-2

Shearing of a shrub (a) will result in dense growth on top and a "leggy" plant (b) avoid this practice at all times.

Improper Shearing

Figure A-3

g) in Junipers keep shape by cutting tips just prior to new growth in spring.

A checklist of poor growth habits most commonly associated with those trees proposed for planting at Kennedy Park is found in Table A-1.

STRUCTURAL DEFICIENCY CHECKLIST

SPECIES	DOUBLE LEADER	WEAK CROTCH	NARROW BRANCH UNION	WATER SPROUTS	CROWN OR ROOT SUCKERS	UNEVEN GROWTH
Sugar Maple			X			
Horse Chestnut	X	X			X	
Green Ash			X			
Sweet Gum						
Austrian Pine						X
Red Oak	X			X		
Linden				X	X	
Hornbeam	X		X			
Red Bud				X		
Dogwood				X	X	
Hawthorne			X			
Silverbell				X	X	
Crabapple				X	X	
Cherry				X	X	
Sumac						
Tree Lilac				X	X	
Red Cedar						X

Structural Deficiency Checklist Table A-1

2. Insect and Disease Prevention

Although resistance is generally the rule and disease the exception, there are certain pest problems associated with tree and shrub culture. These disease and insect problems can cause substantial damage and even mortality if left untreated. Fortunately, there are chemicals available that can be applied to protect plant materials from these infestations.

Major pests and diseases of Kennedy Park trees can be held in check through the implementation of a preventitive spray program similar to that found in Table A-2.

IDENTIFICATION AND CONTROL OF MAJOR PEST PROBLEMS IN TREES

SPECIES	MAJOR PROBLEM	CONTROL
Sugar Maple	Scale Insects	Spray Malathion in August
Horse Chestnut	Fungus Leaf Blotch	Spray Fore at budbreak
Green Ash	Scale Insects	Apply Malathion in June
Sweet Gum	-	-
Austrian Pine	Needle Scale	Apply Superior Oil as Dormant Spray in April
Red Oak	Gypsy Moths	Apply Methoxy-chlor in late Spring
Linden	Aphids	Apply Malathion in late Spring
Hornbeam	-	-
Redbud	-	-
Dogwood	Borers	Apply Methoxy-chlor in August
Hawthorne	Fungus Rust	Spray Daconil in Spring
Silverbell	-	-
Crabapple	Japanese beetle	Apply Malathion in June
Cherry	Japanese beetle	Apply Malathion in June
Sumac	-	-
Tree Lilac	Borers	Apply Methoxy-chlor in August
Red Cedar	Fungus Rust	Spray in Spring with Daconil

Identification & Control of Major Pest Problems in Trees — Table A-2

C. SHRUB CARE

1. Pruning

Pruning to shape a shrub is often needed, but care must be exercised. Poor pruning practices produce shrubs with a natural "hair cut" appearance (Figure A-3).

As with trees, there are many reasons for periodically pruning shrubs. Continued fitness, size restrictions and reconditioning are a few. The scope and direction of the pruning operation is linked to the flowering habit and branching pattern of each species. Table A-3 identifies some of the shrubs recommended for planting at Kennedy Park as either multi-or single-stem specimens.

PRUNING CATEGORY FOR SHRUBS

SPECIES	MULTI STEM	SINGLE STEM
Sweet Fern	X	
Winged Euonymus		X
Smooth Hydrangea	X	
Kerria	X	
Jetbead	X	
Dwarf Spirea	X	
Stephanandra	X	
Forsythia	X	
Bayberry		X
Mockorange	X	
Highbush Blueberry	X	
Arrowwood	X	

Pruning Category for Shrubs — Table A-3

a) Pruning of Multi-stem Shrubs

Renewal Pruning (Figure A-4) should be performed in late winter on shrubs in this category to prevent an overgrown appearance, legginess and poor flower quality. Height reduction, thinning and improvement of flower quality can all be accomplished before bloom by removing the oldest and weakest canes at or near the ground line, leaving the younger (shorter), healthiest flowering canes. The shoots from the base will flower in the second season and replace those left the previous year. The shrub is thus "renewed" and if thinned regularly, will always have healthy, flowering canes and will not become overgrown. One-third of the canes shall be removed each year, so that every three years the shrub is completely rejuvenated.

Thinning is extremely important in the case of Forsythia, Jetbead, and Spirea. After three years canes of these shrubs lose their vigor and often become diseased.

Some shrubs, for example, Kerria & Stephanandra, may need occasional trimmming of individual shoots at the ends of branches to maintain a uniform shape. The appropriate procedure here is to "drop-crotch" the specific branch, removing the errant shoot at the branch juncture, while avoiding an overall shearing.(Figure A-5)

For a few summer-flowering shrubs, such as Hydrangea, cutting back to near the soil line in late winter is desirable during their first season of growth, allowing all new canes to grow from latent buds. This, of course, is a drastic form of shearing (Figure A-6).

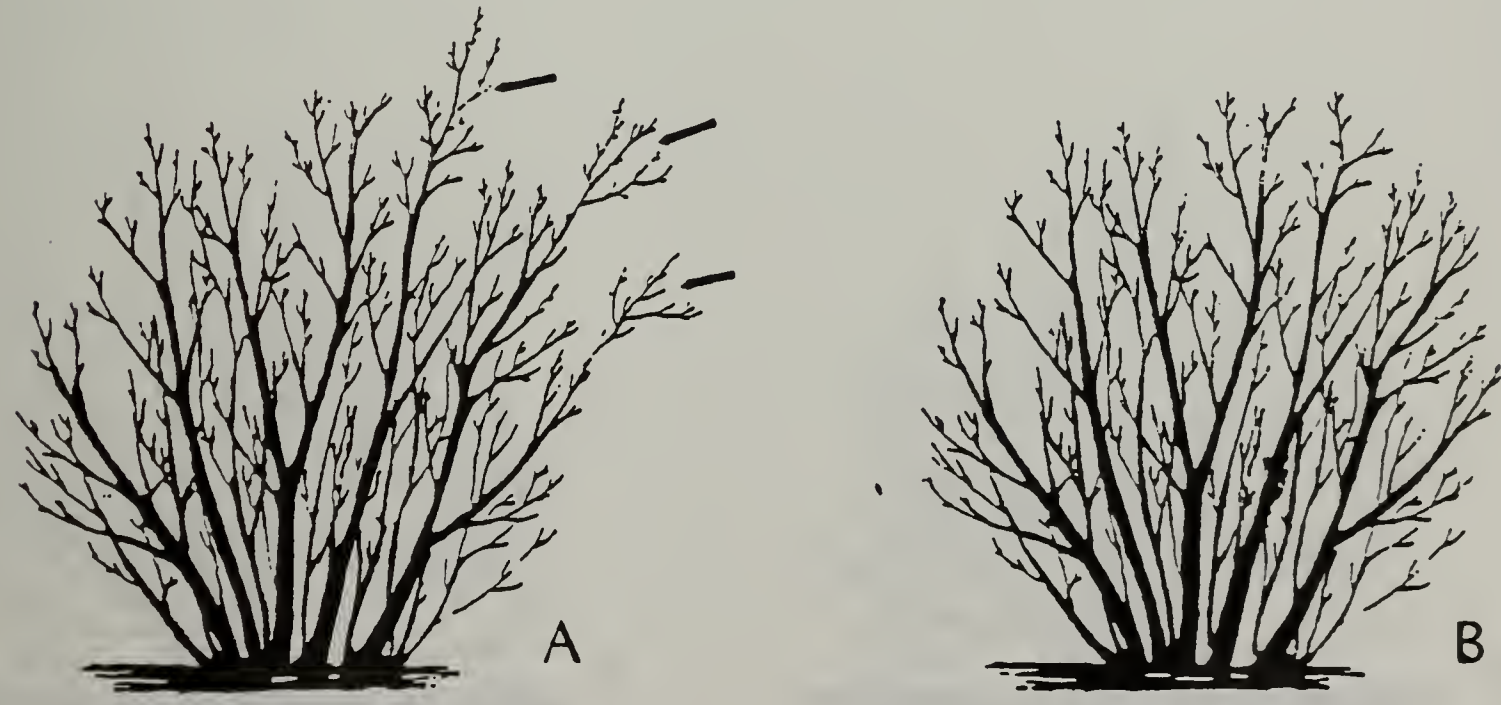
b) Pruning of Shrubs with a Single Stem or Trunk

Some shrubs have a single main trunk, resembling the form of a small tree. Viburnum and Euonymus are shrubs in this category. Obviously, these shrubs should not be cut to the ground, but rather treated in the same manner as a small tree (Figure A-7).

A properly thinned shrub (a) prevents the "leggy shrub" and promotes new growth at the base from latent buds (b).

Renewal Pruning

Figure A-4



Removal of a few unwanted branches by drop-crotching (a) may be needed to reshape shrub (b).

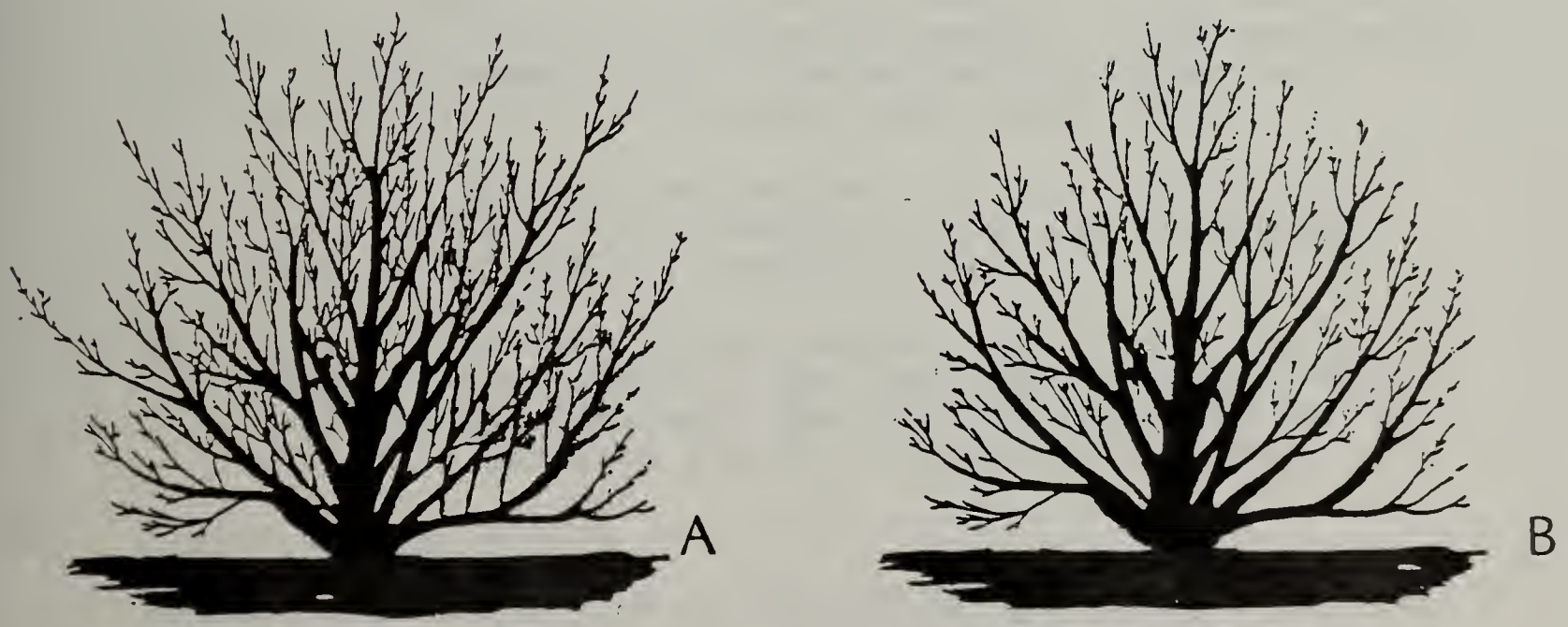
Drop-Crotching

Figure A-5

A few summer flowering shrubs are best cut to stubs during the first season of growth, in late winter (a) and renewed from sprouts arising from latent buds (b).

Ground Shearing

Figure A-6



Shrubs with single, tree-like trunk (a) should be thinned from outside (b).

Pruning Shrubs with Single Stem

Figure A-7

Thinning of interfering, weak or excessive growth and stepping back by drop-crotch methods will be necessary on occasion. This practice should also be performed in late winter.

D. TREE AND SHRUB FERTILIZATION PROCEDURES

Fertilization of landscape plants maintains satisfactory vigor and growth and corrects mineral element deficiencies. The following information provides a guide for the application of fertilizer to new trees and shrubs in the Kennedy Park landscape.

1. Type of Fertilizer - Slow Release

   An inorganic or organic type fertilizer characterized by slow rate of release, long residual, low root injury potential and low water solubility should be used for treating plant materials at Kennedy Park.

2. Fertilizer Analysis

   Use fertilizers with a 3-1-2, or 3-1-1 ratio for best response such as 24-8-16, 18-6-12, 18-5-11, 15-5-5, 12-4-4 or similar formulations. Soluble fertilizers with ratios of 20-20-20 or other similar ratios may also be used.

3. Rates of Application

   The rates suggested in this text should only be used as a guideline to fertilizing trees and shrubs. Soil and foliar tests, and recommendations from university or private testing labs should be followed when available.

   a) Shrubs - Square Foot Method
      Apply 1-1/2-2 lbs. actual nitrogen per 1000 square feet of mulched or, bedding area.

   b) Trees - Diameter Breast Height
      Apply 1/4 lb. actual N per inch DBH to trees under 6-inches in diameter. The rate is increased to 1/2 lb. N per inch DBH for trees over 6 inches.

4. Timing of Application

   Autumn is an ideal time to fertilize, generally after the first hard freeze and before the moisture in the soil freezes and root activity ceases. The period between March and April, or prior to early spring growth, is also appropriate.

5. Method of Application

a) Shrubs - Surface Application: - Fertilizer is placed in a spreader and calibrated to apply the proper amount of material per 1000 sq. ft. Care should be taken to avoid excessive overlapping.

b) Trees - Drill Hole Method: - The drill holes should be in concentric circles in the soil around the tree base, beginning 2-3 foot or more from the trunk and extending 2-3 foot or more beyond the drip line. Space holes 2 feet apart and drill 12 to 18 inches deep. The recommended rate of fertilizer should be uniformly distributed among the holes.

Appendix B

CONSERVATION/PRESERVATION RESTRICTION

AGREEMENT

by and between

THE COMMONWEALTH OF MASSACHUSETTS

acting by and through

the Department of Environmental Management

and

THE CITY OF _____

acting by and through

_____

relative to the

preservation of land in connection with

THE OLMSTED HISTORIC LANDSCAPE PRESERVATION PROGRAM

This AGREEMENT, entered into this _____ day of _____, 19____, by and between the Commonwealth of Massachusetts, acting by and through the Department of Environmental Management (hereinafter referred to as the "Department"), pursuant to and by virtue of the powers conferred by Massachusetts General Laws,Chapters 21 and 132A, as amended, by Chapter 723 of the Acts of 1983, as amended, by Chapter 573 of the Acts of 1985 and by Chapter 564 of the Acts of 1987, and the City of _____, (hereinafter referred to as the "City"), acting by and through _____ pursuant to and by virtue of a vote of the City Council, dated _____, 19_____.

WITNESSETH THAT:

WHEREAS,the General Court has made funds available to the Department of Environmental Management, for the purpose of restoration and rehabilitation of parks associated with Frederick Law Olmsted, and

WHEREAS, the City of _____ is the owner in fee simple of certain real property known as _____ (hereinafter referred to as the "Park"), described in deed or deeds as specified in the Deed List appended hereto as Attachment I, and shown on the map appended hereto as Attachment II, and

WHEREAS, the Department, under the Olmsted Historic Landscape Preservation Program (hereinafter referred to as the "Program"), has engaged at its expense, in conjunction with and on behalf of the City, the services of consultant historians, surveyors, archaeologists, planners and landscape architects to prepare for the City, among other materials, a Master Plan for the restoration and rehabilitation of the Park, and

WHEREAS, the City has executed a agreement with the Department, dated _____ 19___, (hereinafter referred to as the "Grant Agreement") under which the Department agreed to grant funds, in an amount not to exceed _____, to the City for the purpose of making various improvements to the Park in conformance with such Master Plan, and

WHEREAS, the City, in said Grant Agreement, agreed to formally accept such Master Plan for the Park, and

WHEREAS, the City, by vote taken on _____, a certified copy of which is appended hereto as Attachment III, accepted such Master Plan, (hereinafter referred to as the "Master Plan") a copy of which is hereby incorporated herein by reference

as if set forth fully and at length, and is appended hereto as Attachment IV, and

WHEREAS, the City, in said Grant Agreement agreed to execute a conservation/preservation restriction with the Department relative to the Park, and

WHEREAS, the City, in said Grant Agreement, also agreed that it would be ineligible to receive any future funds from the Department under the Program unless it adhered to such Master Plan, and

WHEREAS, the General Court, through Chapter 564 of the Acts of 1987, has made additional funds available to the Department in connection with the Program, and

WHEREAS, the City and the Department mutually desire to restrict changes in the appearance and condition of the Park which is nationally significant for its historic association with Frederick Law Olmsted, to restrict uses which are inappropriate to its character as a historic site and to restrict any other acts or uses detrimental to the appropriate preservation of the Park, and

WHEREAS, the Master Plan defines the Park's character as a historic site and sets forth guidelines for the appropriate preservation of the Park, and

WHEREAS, the Park is listed, or is eligible for listing, on the State Register of Historic Places, administered by the Massachusetts Historical Commission, pursuant to Massachusetts General Laws, Chapter 9, Sections 26C and 27C, and regulations promulgated thereunder, and

WHEREAS, the City warrants that there are no restrictions on or affecting the Park preventing or prohibiting the City from making the agreements contained herein,

NOW, THEREFORE, in consideration of mutual covenants and conditions set forth herein and other good and valuable consideration, the parties hereby agree as follows:

ARTICLE I - Definitions

The following terms shall have the following meanings in this Agreement:

A. "Agreement" shall mean this agreement.

B. "Emergency" shall mean any situation which develops unexpectedly, demands immediate action and is of a serious nature, such as the protection of human life, public health and protection and preservation of real and personal property.

C. "Improvement" shall mean any construction activity within the Park.

D. "Integrity" shall mean complete, cohesive correspondence with the governing principles and design intent of the historic restoration and rehabilitation of the Park as set forth in the Master Plan.

E. "Minor Alteration" shall mean any alteration to the Park so described in Attachment V.

F. "Major Alteration" shall mean any alteration to the Park so described in Attachment V.

ARTICLE II - Agreements of the City

A. The City agrees for the duration of this Agreement:

(1) That it accepts the Master Plan as the basis for:

(a) the management and maintenance of the Park, and

(b) all construction activities therein;

(2) That it will not undertake or allow any alteration to the Park unless such alteration is:

(a) a minor alteration which does not impair the historical integrity of the Park, and which is in conformance with the Master Plan, or

(b) a major alteration for which it has obtained written permission from the Department to perform, or

(c) an alteration necessitated by an emergency promptly reported to the Department under the procedure set forth in Article IV, Paragraph E.

(3) That it shall assume the total responsibility for continued maintenance, repair, upkeep and administration of the Park, so as to preserve the appearance and the historic integrity the materials, workmanship, configuration and function of the Park: and that the Maintenance/Management Plan included in the Master Plan shall be used by both the City and the Department as the standard against which to measure acceptable performance of the City's responsibility in this regard: provided that nothing contained in this Agreement shall be deemed to restrict or prohibit the City from seeking financial or other assistance from other sources in carrying out its responsibility hereunder.

(4) That it shall submit to the Department, once every two years, a written report, in a form acceptable to the Department

describing the maintenance activities preformed in the Park during the two years previous and what major alterations were begun, in progress or completed in the Park during the two years previous; provide that the first such report shall be submitted by September 30, 1989

(B) The City agrees for a period of twenty years from the date of execution of this agreement:

(1) That no major alteration shall be made to any Improvement, the cost of which has been defrayed in whole or in part by Program funds granted by the Department to the City, unless:

(a) such major alteration has been approved in writing in advance by the Department, or

(b) such alteration is necessitated by an emergency promptly reported to the Department under the procedure set forth in Article IV, Paragraph E.

(2) That the Department shall have the right to determine the replacement value of any such Improvement which the City may propose to alter in the year of such alteration, provided that the City may employ the services of an independent cost estimator, approved in advance by the Department, to determine such value; and that the Department shall have the right to require the City to remit to the Commonwealth an amount equal to such value in the event that such alteration is carried out.

ARTICLE III - Agreements of the Department

(A) The Department agrees for the duration of the Agreement:

(1) That it will, subject to the availability of funds, provide technical assistance to the City relative to any matter covered

by this agreement, if so requested by the City, including but not limited to, determining whether potential alterations to the Park would impair the historical integrity of the Park, and suggesting alterations which would be consistent with the historic integrity of the Park and which would be in conformance with the Master Plan;

(2) That, upon receipt from the City of a written request to carry out a major alteration within the Park or to amend any portion of the Master Plan, accompanied by the City's rationale and justification for such major alteration or such amendment, it will promptly review such request and, if, in consultation with the Massachusetts Historical Commission, it determine that the proposed major alteration or the proposed amendment would be consistent with the maintaining of the historic integrity of the Park, shall approve such alteration or amendment.

ARTICLE IV - Miscellaneous Provisions

A. Inspection of Premises

The City agrees that the Department shall have the right to enter the Park at any time for the purpose of determining whether any violation of any provision of this Agreement has occurred. In the event that any such violations are found by the Department, it shall notify the City in writing that the City shall have one month to remove or correct the violation or to propose a solution and a timetable for performance acceptable to the Department.

B. Enforcement

If the City fails to comply with any provision of this Agreement, the Department shall have the right to withhold any pending payment to the City and any future funding from the Department.

This right shall be in addition to, and not in limitation of, any other remedies, in law or in equity, available to the Department for enforcement of the Agreement.

C. Severability

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity and enforceability of any other provision of the Agreement.

D. Taxes

No Massachusetts deed excise tax stamps are affixed hereto as none are required pursuant to Massachusetts General Laws, Chapter 64D, Section 1, and any amendment thereto.

E. Emergency Notice

(1) Whenever, in the judgement of the City, an emergency exists which may necessitate an alteration to the Park, the City agrees that it shall promptly notify the Department in writing. Such notification shall include:

(a) a statement that, in the City's judgement, an emergency situation exists, together with a description of the nature of the emergency; and

(b) a description of the alteration(s) under consideration by the City as a result of the emergency; and

(c) a request for permission to carry out such alteration(s).

The Department agrees to respond within fourteen (14) calendar days of receipt to any such request for emergency approval, in accordance with provisions of Article III, Section A.

Following its determination that an emergency exists, the City may, and is encourage to, contact the Department before proposing

a particular alteration, so that the Department may assist the City in developing an approach consistent with maintaining the historic integrity of the Park.

(2) The City may request that the Department waive one or more of the requirements set forth in Section (1) above when to comply with such requirement(s) would give rise to unacceptable consequences; provided, however, that, in the event that such waiver is granted, the City agrees that it shall provide the Department, within seven (7) calendar days of receipt of notice of the granting of the waiver, a written description of the nature of the emergency and any alteration(s) carried out under such waiver.

F. Notice (General)

(1) Any Notice, approval, consent or other communication under this agreement shall be in writing and shall be considered given when delivered personally or mailed by registered mail, return receipt requested, to the parties at the addresses indicated below (or at such other addresses as one party may specify by notice to the other.)

(a) If to the City, to it at:

(b) If to the Department, to it at:

Office of the Commissioner
Department of Environmental Management
100 Cambridge Street
Boston, MA 02202

(with copy to)

Office of the Director
Olmsted Historic Landscape Preservation Program
Division of Planning and Development
Department of Environmental Management
225 Friend Street
Boston, MA 02214

(2) Notwithstanding the provisions of Section (1) above, a request to the Department in connection with Article IV, Section E.(2) may be in the form of a telephone communication to the Commissioner of the Department, accompanied by a similar telephone communication to the Director of the Olmsted Historic Landscape Preservation Program.

G. Waiver

The waiver by either party of one breach of any term, condition, covenant, obligation or agreement herein shall not be considered to be a waiver of that or any other term, condition, covenant obligation or agreement, or of any subsequent breach thereof.

H. Successors

This Agreement shall be binding upon and inure to the benefit of the parties hereto, their successors, legal representatives and assigns.

ATTACHMENT V

For the purpose of this Agreement, the following description of Major Alterations and Minor Alteration will be used to classify any alterations made to the Park. These descriptions and representative lists shall be used as a guide in conjunction with the Master Plan to determine the nature of the Alteration.

Major Alterations

Any alteration which alters the historical, architectural and landscape architectural integrity of the Park shall be considered a Major Alteration. The following description will be used to define a major alteration:

a.) The removal, demolition or relocation of any Improvement;

b.) The addition of new features not called for in the Master Plan of the Park, such as statues, site furnishings, landforms, plantings, water features, etc;

c.) The modification of existing Park elements in a manner not provided for in the Master Plan.

The following is a representative list of actions which would be considered Major Alterations:

- the removal or relocation of any living plant material not called for in the Master Plan.
- changing the style or appearance of any park furnishing, such as benches, lights, signs, etc.;
- reorienting or relocating any part of the circulation system;
- changing the shape or form of park features, such as bodies of water, mounds, and plant groupings;
- changing areas of surface material, such as lawns, pavement etc.;
- addition of underground utilities.

Minor Alterations

Any alteration which does not alter the historical, architectural and landscape architectural integrity of the Park will be considered a Minor Alteration. The following descriptions will be used to define a Minor Alterations:

a.) Any work or action which is considered part of routine maintenance as described in the Maintenance Management Plan (Exhibit E of the Grants Agreement, to be attached and made part of this Agreement).

b.) The removal of any item which is to be repaired and/or serviced and returned to the site in a location recommended in the Master Plan;

c.) any temporary alteration of an area for the purposes of constructing additional improvements recommended in the Master Plan, provided the area is returned to the appearance recommended in the Master Plan.

The following is a representative list of actions which would be considered Minor Alterations:

- pruning and trimming of plant material;

- refinishing any feature to return it to its appearance as recommended in the Master Plan;

- The repair or replacement of underground utilities, provided the ground surface is returned to its appearance as recommended in the Master Plan;

- removal of plant material which is dead, diseased or severely declining in health;

- removal of any feature which has been vandalized or otherwise destroyed so the feature is no longer usable.

Endnotes

ENDNOTES

1. Charles Capen McLaughlin, Editor in Chief, and Charles E. Beveridge and David Schulyer, Editors, "The Papers of Frederick Law Olmsted, Volume III Creating Central Park 1857-1861", p. 212 and 213.

2. Photograph courtesy of the Fall River Historical Society.

3. Arleyn A. Levee, "Kennedy/South Park: History of a Public Landscape", Draft.

4. Albert Veri & Associates, Inc., "Site Analysis and Evaluation of Kennedy Park" (December 1986).

5. Photograph courtesy of the Fall River Historical Society.

6. Albert Veri & Associates, Inc.

7. Photograph Courtesy of the Fall River Historical Society.

8. Ibid.

9. Arleyn A. Levee.

10. Arleyn A. Levee and Kim E. Lovejoy, "Kennedy/South Park: History of a Public Landscape, " "Historic Furnishings Report." Draft.

11. Ibid.

12. Albert Veri & Associates, Inc.

13. Gold Trade Publications. "Landscape Management." P.O. Box 156,Encino, CA 91426

14. Gold Trade Publications. "Arbor Age." P. O. Box 156, Encino, CA 91426.

15. Intertec Publishing Co, "Grounds Maintenance." 9221 Quivira Road, P. O. Box 12901, Overland Park, KS 66212-0930

16. Albert Veri & Associates, Inc.

17. Central Park Conservancy, Inc., "1985 Annual Report," p. 24.

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"Replacing the Understory Plantings of Central Park".